



Linda S. Adams
Secretary for
Environmental Protection

California Regional Water Quality Control Board North Coast Region

Geoffrey M. Hales, Chairman

www.waterboards.ca.gov/northcoast
5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403
Phone: (877) 721-9203 (toll free) • Office: (707) 576-2220 • FAX: (707) 523-0135



Arnold
Schwarzenegger
Governor

ORDER NO. R1-2010-0084
NPDES NO. CA0005843
WDID NO. 1B80051OMEN

WASTE DISCHARGE REQUIREMENTS FOR THE MENDOCINO FOREST PRODUCTS COMPANY, LLC UKIAH SAWMILL COMPLEX MENDOCINO COUNTY

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 1. Discharger Information

Discharger	Mendocino Forest Products Company, LLC
Name of Facility	Ukiah Sawmill Complex
Facility Address	850 Kunzler Ranch Road
	Ukiah, CA 95482
	Mendocino County
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a minor discharge	

The discharge by the Mendocino Forest Products Company, LLC to the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Log deck sprinkler water runoff	39° 11' 8" N	123° 12' 12" W	Hensley Creek, tributary to the Russian River

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	December 9, 2010
This Order shall become effective on:	December 9, 2010
This Order shall expire on:	December 9, 2015
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	December 9, 2011

IT IS HEREBY ORDERED, that this Order supersedes Order No. R1-2002-0086 upon the effective date specified in Table 3. This action in no way prevents the Regional Water Quality Control Board from taking any enforcement action for past violations of the previous permit. If any part of this Order is subject to a temporary stay of enforcement, unless otherwise specified, the Discharger shall comply with the analogous portions of Order No. R1-2002-0086, which shall remain in effect for all purposes during the pendency of the stay.

I, Catherine Kuhlman, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on December 9, 2010.

Catherine Kuhlman, Executive Officer

Table of Contents

I.	Facility Information	2
II.	Findings.....	3
III.	Discharge Prohibitions	10
IV.	Effluent Limitations and Discharge Specifications	11
A.	Effluent Limitations – Discharge Point No. 001.....	11
V.	Receiving Water Limitations.....	13
A.	Surface Water Limitations	13
B.	Groundwater Limitations.....	14
VI.	Provisions.....	14
A.	Standard Provisions	14
B.	Monitoring and Reporting Program (MRP) Requirements	16
C.	Special Provisions	16
1.	Reopener Provisions	16
2.	Special Studies, Technical Reports and Additional Monitoring Requirements.....	17
3.	Best Management Practices and Pollution Prevention	22
4.	Construction, Operation and Maintenance Specifications	23
5.	Special Provisions for Municipal Facilities (POTWs Only) – Not Applicable ..	24
6.	Other Special Provisions	24
7.	Compliance Schedules – Not Applicable.....	25
VII.	Compliance Determination	25

List of Tables

Table 1.	Discharger Information	1
Table 2.	Discharge Location	1
Table 3.	Administrative Information.....	2
Table 4.	Facility Information	2
Table 5.	Basin Plan Beneficial Uses	6
Table 6.	Effluent Limitations	12

List of Attachments

Attachment A – Definitions	A-1
Attachment B – Map.....	B-1
Attachment C – Flow Schematic	C-1
Attachment D – Standard Provisions.....	C-1
Attachment E – Monitoring and Reporting Program.....	E-1
Attachment F – Fact Sheet.....	F-1

I. FACILITY INFORMATION

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 4. Facility Information

Discharger	Mendocino Forest Products Company, LLC
Name of Facility	Ukiah Sawmill Complex
Facility Address	850 Kunzler Ranch Road
	Ukiah, CA 95482
	Sonoma County
Facility Contact, Title, and Phone	Cheryl Moore, Environmental Manager, (707) 485-6740
Mailing Address	P.O. Box 390, Calpella, CA 95418
Type of Facility	Sawmill (SIC Code 2421)
Facility Design Flow	0.022 million gallons per day (MGD)

II. FINDINGS

The California Regional Water Quality Control Board, North Coast Region (hereinafter Regional Water Board), finds:

A. Background. The Mendocino Forest Products Company, LLC (hereinafter Discharger) is currently discharging pursuant to Order No. R1-2002-0086, Monitoring and Reporting Program (MRP) No. R1-2002-0086, and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0005843. The Discharger submitted a Report of Waste Discharge, dated November 10, 2006, and applied for a NPDES permit renewal to discharge process water from the Ukiah Sawmill Complex, hereinafter Facility. The application was deemed complete on August 17, 2010.

For the purposes of this Order, references to the “discharger” or “permittee” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

On April 13, 2010, the State Water Resources Control Board approved the Discharger’s Notice of Intent to Comply with the terms of the General Permit to Discharge Storm Water Associated with Industrial Activity (WQ Order No. 97-03-DWQ, hereinafter the General Industrial Stormwater Permit). All stormwater discharges and associated monitoring will occur under the General Industrial Stormwater Permit.

B. Facility Description. The Discharger owns and operates a 300-million board foot sawmill complex in conjunction with a natural gas fired boiler for generation of steam for kiln heating (hereinafter Facility), in the City of Ukiah, Mendocino County, CA directly adjacent to Hensley Creek as shown in Attachment B. The Facility consists of a paved log yard, sawmill, sorter/stacker, planer mill, lumber storage, wood treating facility, flooring facility, drying kiln, a boiler, bone yard, vehicle maintenance shop, and offices which support lumber manufacturing, treatment and storage operations. Half of the site is undeveloped and not used for sawmill operations while the other half is paved and essentially impervious to storm water infiltration.

The Discharger uses approximately 1.5 million gallons per day (MGD) during the dry season, and 50,000 gallons per day during the rainy season of pumped groundwater and municipal water for log sprinkling. The excess log yard runoff enters a return ditch and is directed to a recycle pond. When available, pond water is recirculated through the sprinkler system. Storm water runoff from portions of the site enter the recycle pond and is co-mingled with process flow. Storm water runoff flows co-mingled with process water are described as process water for purposes of this Order. During substantial storm events, the pond overflows and discharges process water to Hensley Creek. Of the process wastewaters produced at the Facility, log deck sprinkler water is the only process wastewater discharged to a water of the United States; domestic wastewater and boiler blowdown are discharged to septic tank/leachfield systems onsite.

Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

- C. Legal Authorities.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).
- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E are also incorporated into this Order.
- E. California Environmental Quality Act (CEQA).** Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.
- F. Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Effluent limitation Guidelines (ELGs) for the Wet Storage Subcategory of the Timber Products Processing Point Source Category in 40 CFR Part 429, which is divided into sixteen subcategories. Specifically, Subpart A (Barking Subcategory), Subpart I (Wet Storage Subcategory), and Subpart K (Sawmills and Planing Mills Subcategory) are applicable. Any existing point source subject to these subparts shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT): there shall be no debris discharged and the pH shall be within the range of 6.0 to 9.0. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).
- G. Water Quality-Based Effluent Limitations.** Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable

potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

- H. Water Quality Control Plans.** The Regional Water Board adopted a *Water Quality Control Plan for the North Coast Region* (hereinafter the Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which establishes State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to Hensley Creek are described in Table 5, below.

Table 5. Basin Plan Beneficial Uses

Discharge Point No.	Receiving Water Name	Beneficial Use(s)
001	Hensley Creek, tributary to the Russian River within the Ukiah Hydrologic Subarea of the Russian River Hydrologic Unit	<p><u>Existing:</u></p> <ul style="list-style-type: none"> • Municipal and Domestic Supply (MUN) • Agricultural Supply (AGR) • Industrial Service Supply (IND) • Ground Water Recharge (GWR) • Freshwater Replenishment (FRSH) • Navigation (NAV) • Hydropower Generation (POW) • Water Contact Recreation (REC-1) • Non-Contact Water Recreation (REC-2) • Commercial and Sport Fishing (COMM) • Warm Freshwater Habitat (WARM) • Cold Freshwater Habitat (COLD) • Wildlife Habitat (WILD) • Preservation of Rare, Threatened, or Endangered Species (RARE) • Migration of Aquatic Organisms (MIGR) • Spawning, Reproduction, and/or Early Development (SPWN) <p><u>Potential:</u></p> <ul style="list-style-type: none"> • Industrial Process Supply (PRO) • Shellfish Harvesting (SHELL) • Aquaculture (AQUA)
--	Groundwater	<p><u>Existing</u></p> <ul style="list-style-type: none"> • Municipal and Domestic Supply (MUN) • Industrial Service Supply (IND) • Industrial Process Supply (PRO) • Agricultural Supply (AGR) • Freshwater Replenishment (FRSH)

In addition to the beneficial uses set out in the Basin Plan, there are several implementation plans that include actions intended to meet water quality objectives and protect beneficial uses of the North Coastal Basin. For the Russian River and its tributaries, no point source waste discharges are allowed from May 15 through September 30 and during all other periods when the waste discharge flow is greater than one percent of the receiving stream's flow. The Basin Plan also contains an Action Plan for Logging, Construction and Associated Activities that prohibits certain types of discharges. This Order implements the requirements contained in the Basin Plan.

- I. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About 40 criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics

criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

J. State Implementation Policy. On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

K. Compliance Schedules and Interim Requirements. Section 2.1 of the SIP provides that, based on a discharger's request and demonstration that it is infeasible for an existing Discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds one (1) year, the Order must include interim numeric limitations for that constituent or parameter.

This Order does not include compliance schedules or interim effluent limitations.

L. Alaska Rule. On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 C.F.R. § 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.

M. Stringency of Requirements for Individual Pollutants. This Order contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on debris and pH. Restrictions on these pollutants are discussed in section IV.B.2 of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality

objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to section 131.38. The scientific procedures for calculating the individual WQBELs for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless “applicable water quality standards for purposes of the CWA” pursuant to section 131.21(c)(1). The remaining water quality objectives and beneficial uses implemented by this Order (specifically the addition of the beneficial uses Water Quality Enhancement (WQE), Flood Peak Attenuation/Flood Water Storage (FLD), Wetland Habitat (WET), Native American Culture (CUL), and Subsistence Fishing (FISH), and the General Objective regarding antidegradation in the Basin Plan) were approved by USEPA on March 4, 2005 and are applicable water quality standards pursuant to section 131.21(c)(2). Collectively, this Order’s restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

- N. Antidegradation Policy.** Section 131.12 requires that the State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board’s Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. As discussed in detail in the Fact Sheet the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.
- O. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR § 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. Effluent limitations for woody material that will pass through a 1.0-inch diameter round opening, turbidity, and sediment, which consisted of the implementation of best management practices (BMPs), have not been retained in this Order, but have been included as Special Provisions in section VI.C.3 of this Order.

The applicable ELGs for the Wet Storage Subcategory of the Timber Products Processing Point Source Category in 40 CFR Part 429, Subpart I require only that debris (as defined in Attachment A) shall not be discharged. In addition to the prohibition of the discharge of debris, Order No. R1-2002-0086 also required effluent limitations, in the form of BMPs, for woody material that will pass through a 1.0-inch diameter round opening to further eliminate discharges of sawdust to

the receiving water and for turbidity and sediment to minimize discharges of these constituents to the receiving water, in accordance with 40 CFR 122.41(k). However, 40 CFR 122.41(k)(3) states that BMPs should be required where numeric effluent limitations are infeasible. Because numeric effluent limitations are infeasible, and because these requirements are not included in the applicable ELGs, it is more appropriate to include these BMPs as Special Provisions. Consistent with CWA section 402(o)(2)(B)(ii), which allows for the removal of effluent limitations where technical mistakes or mistaken interpretations of the law were made in issuing the permit, effluent limitations for woody material that will pass through a 1.0-inch diameter round opening, turbidity, and sediment are not included in this Order, but are included as Special Provisions, and anti-backsliding requirements are satisfied.

- P. Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the State. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.
- Q. Monitoring and Reporting.** Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.
- R. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet (Attachment F).
- S. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsection V.B of this Order are included to implement State law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- T. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste

Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.

- U. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

III. DISCHARGE PROHIBITIONS

- A.** The discharge of any waste not disclosed by the Discharger or not within the reasonable contemplation of the Regional Water Board is prohibited.
- B.** Creation of a pollution, contamination, or nuisance, as defined by section 13050 of the Water Code is prohibited.
- C.** The discharge of domestic waste, treated or untreated, to surface waters is prohibited.
- D.** The discharge of waste at any point not described in Finding II.B. or authorized by any State Water Board or other Regional Water Board permit is prohibited.
- E.** The discharge of wood treatment chemicals or stain control fungicides to surface water or groundwater is prohibited.
- F.** The discharge of process water from the Facility to the Russian River and its tributaries is prohibited during the period from May 15 through September 30 of each year.
- G.** During the period from October 1 through May 14, discharges of treated wastewater to Hensley Creek, tributary to the Russian River, shall not exceed one percent of the flow of Hensley Creek, as measured at Monitoring Location RSW-001. For purposes of this Order, compliance with this discharge prohibition shall be determined as follows:
 - 1.** In no case shall the total volume of process water discharged in a calendar month exceed one percent of the total volume of Hensley Creek at Monitoring Location RSW-001 in the same calendar month. At the beginning of the discharge season¹, the monthly flow volume comparisons shall be based on the date when the discharge commenced to the end of the calendar month. At the end of the discharge season, the monthly flow volume shall be based on the first day of the calendar month to the date when the discharge ceased for the season.
- H.** The discharge of soil, silt, bark, slash, sawdust, or other organic material from any logging, construction, or associated activity of whatever nature into any

¹ The discharge season is defined as the period between October 1 and May 14.

stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited.

- I. The placing or disposal of soil, silt, bark, slash, sawdust, or other organic material from any logging, construction, or associated activity of whatever nature at locations where such material could pass into any stream or watercourse in the basin in quantities which could be deleterious to fish, wildlife, or other beneficial uses is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point No. 001

1. Final Effluent Limitations – Discharge Point No. 001

- a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location EFF-001 as described in the attached Monitoring and Reporting Program (Attachment E):

Table 6. Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Lead, Total Recoverable	µg/L	2	--	2	--	--
Mercury, Total Recoverable	µg/L	0.050	--	0.10	--	--
Nickel, Total Recoverable	µg/L	3	--	3	--	--
pH	standard units	--	--	--	6.5	8.5
Total Suspended Solids	mg/L	30	45	60	--	--
Settleable Solids	mg/L	0.1	--	0.2	--	--
Chronic Toxicity	TUc	1.0	--	--	--	--

b. Acute Toxicity. There shall be no acute toxicity in the effluent discharged to Hensley Creek. The Discharger will be considered compliant with this limitation when the survival of aquatic organisms in a 96-hour bioassay of undiluted waste complies with the following:

- i. Minimum for any one bioassay: 70 percent survival; and
- ii. Median for any three or more consecutive bioassays⁴: at least 90 percent survival.

Compliance with this effluent limitation shall be determined in accordance with section V.A of the Monitoring and Reporting Program (Attachment E).

c. Debris. There shall be no debris (as defined in Attachment A) discharged.

² Effluent limitations for lead are hardness-dependent. See Attachment E-1 for the full table of hardness-dependent lead effluent limitations, which are to be determined based on the hardness of the receiving water at the time the discharge is sampled.

³ Effluent limitations for nickel are hardness-dependent. See Attachment E-1 for the full table of hardness-dependent nickel effluent limitations, which are to be determined based on the hardness of the receiving water at the time the discharge is sampled.

⁴ During periods of survival greater than 90 percent, the median shall be reported using the three most recent consecutive bioassays. When survival is depressed below 90 percent, the median calculation shall be reported after two more consecutive bioassays have been completed. The median shall continue to be calculated using all bioassays from the first reduction in survival below 90 percent until the median survival of all such samples exceeds 90 percent survival or until three consecutive samples demonstrate survival exceeding 90 percent.

2. Interim Effluent Limitations – Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. Compliance with receiving water limitations shall be measured at monitoring locations described in the MRP (Attachment E). Discharges from the Facility shall not cause the following:

1. The discharge shall not cause the dissolved oxygen concentration of the receiving water to be depressed below 7.0 mg/L. In the event that the receiving waters are determined to have dissolved oxygen concentration of less than 7.0 mg/L, the discharge shall not depress the dissolved oxygen concentration below the existing level.
2. The discharge shall not cause the pH of receiving waters to be depressed below 6.5 nor raised above 8.5. Within this range, the discharge shall not cause the pH of the receiving waters to be changed at any time more than 0.5 units from that which occurs naturally.
3. The discharge shall not cause the turbidity of receiving waters to be increased more than 20 percent above naturally occurring background levels.
4. The discharge shall not cause receiving waters to contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.
5. The discharge shall not cause receiving waters to contain floating materials, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.
6. The discharge shall not cause receiving waters to contain taste- or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or that adversely affect beneficial uses.
7. The discharge shall not cause coloration of receiving waters that causes nuisance or adversely affects beneficial uses.
8. The discharge shall not cause bottom deposits in receiving waters to the extent that such deposits cause nuisance or adversely affect beneficial uses.
9. The discharge shall not cause or contribute concentrations of biostimulants to receiving waters that promote objectionable aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
10. The discharge shall not cause receiving waters to contain toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in humans, plants, animals, or aquatic life. Compliance with this

objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods, as specified by the Regional Water Board.

11. The discharge shall not cause a measurable temperature change in the receiving water at any time.
12. The discharge shall not cause an individual pesticide or combination of pesticides to be present in concentrations that adversely affect beneficial uses. The discharge shall not cause bioaccumulation of pesticide, fungicide, wood treatment chemical, or other toxic pollutant concentrations in bottom sediments or aquatic life to levels which are harmful to human health.
13. The discharge shall not cause receiving waters to contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise affect beneficial uses.
14. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Water Board or the State Water Board, as required by the federal Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the Clean Water Act, or amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.
15. The discharge shall not cause receiving water concentrations of chemical constituents to occur in excess of limits specified in Table 3-2 of the Basin Plan or in excess of more stringent Maximum Contaminant Levels (MCLs) established for these pollutants in title 22, Division 4, Chapter 15, Articles 4 and 5.5 of the California Code of Regulations.

B. Groundwater Limitations

1. The storage and disposal of process water and wastewater shall not cause or contribute to a statistically significant increase in pollutant levels compared to background water quality.
2. The collection, storage, and use of wastewater shall not cause groundwater to contain taste or odor producing substances in concentrations that cause nuisance or adversely affect beneficial uses.

VI. PROVISIONS

A. Standard Provisions

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.

2. Regional Water Board Standard Provisions. The Discharger shall comply with the following Regional Water Board standard provisions:

- a. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
- b. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, interim or final effluent limitation, land discharge specification, reclamation specification, receiving water limitation, or provision of this Order that may result in a significant threat to human health or the environment, such as inundation of treatment components, breach of pond containment, sanitary sewer overflow, irrigation runoff, etc., that results in a discharge to a drainage channel or a surface water, the Discharger shall as soon as possible, but no later than two (2) hours after becoming aware of the discharge, orally⁵ notify the State Office of Emergency Services, the local health officer or directors of environmental health with jurisdiction over the affected water bodies, and the Regional Water Board.
- c. As soon as possible, but no later than twenty-four (24) hours after becoming aware of a discharge to a drainage channel or a surface water, the Discharger shall submit to the Regional Water Board a written certification that the State Office of Emergency Services and the local health officer or directors of environmental health with jurisdiction over the affected water body have been notified of the discharge. Written documentation of the circumstances of the spill event shall be submitted to the Regional Water Board within five (5) days, unless the Regional Water Board waives the confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and to prevent recurrence, including, where applicable, a schedule of implementation. Other types of noncompliance require written notification, as described above, at the time of the normal monitoring report.
- d. Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (Water Code § 1211)

⁵ Oral reporting means direct contact with a Regional Water Board staff person. The oral report may be given in person or by telephone. After business hours, oral contact must be made by calling the State Office of Emergency Services or Regional Water Board spill officer.

B. Monitoring and Reporting Program (MRP)

1. Requirements

- 2. Compliance.** The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order.
- 3. Alternative Locations.** The Discharger may submit a proposal to monitor receiving water at locations different than receiving water locations specified in section VIII of the MRP. The proposal must be received by the Executive Officer within 180 days of the effective date of this Order and specify monitoring locations that are acceptable to the Executive Officer for the purpose of demonstrating compliance with this Order. The Executive Officer will inform the Discharger within 90 days after receipt of the proposal whether the alternative monitoring locations are acceptable.

C. Special Provisions

1. Reopener Provisions

- a. Standard Revisions.** If applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board may reopen this Order and make modifications in accordance with such revised standards.
- b. Reasonable Potential.** This Order may be reopened for modification to include an effluent limitation, if monitoring establishes that the discharge causes, or has the reasonable potential to cause or contribute to, an excursion above a water quality criterion or objective applicable to the receiving water.
- c. Whole Effluent Toxicity.** As a result of a Toxicity Reduction Evaluation (TRE), this Order may be reopened to include a chronic toxicity limitation, a new acute toxicity limitation, and/or a limitation for a specific toxicant identified in the TRE. Additionally, if a numeric chronic toxicity water quality objective is adopted by the State Water Board; this Order may be reopened to include a numeric chronic toxicity effluent limitation based on that objective.
- d. 303(d)-Listed Pollutants.** If an applicable TMDL program is adopted, this Order may be reopened and effluent limitations for the pollutant(s) that are the subject of the TMDL will be modified or imposed to conform this Order to the TMDL requirements. If the Regional Water Board determines that a voluntary offset program is feasible for and desired by the Discharger, then this Order may be reopened to reevaluate the effluent limitations for the pollutant(s) that are subject of the TMDL and, if appropriate, to incorporate provisions recognizing the Discharger's participation in an offset program.

- e. **Water Effects Ratios (WERs) and Metal Translators.** A default WER of 1.0 has been used in this Order for calculating CTR criteria for applicable priority pollutant inorganic constituents. In addition, default dissolved-to-total metal translators have been used to convert water quality objectives from dissolved to total recoverable when developing effluent limitations for lead and nickel. If the Discharger performs studies to determine site-specific WERs and /or site-specific dissolved-to-total metal translators, this Order may be reopened to modify the effluent limitations for the applicable inorganic constituents.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

- i. **Whole Effluent Toxicity.** In addition to a limitation for whole effluent acute and chronic toxicity; the MRP of this Order requires routine monitoring for whole effluent chronic toxicity to determine compliance with the Basin Plan's narrative water quality objective for toxicity. As established by the MRP, if the acute toxicity effluent limitation or a chronic toxicity monitoring trigger of 1.0 TUC (where $TUC = 100/NOEC$)⁶ is exceeded, the Discharger shall conduct accelerated monitoring as specified in section V. of the MRP. Results of accelerated toxicity monitoring will indicate a need to conduct a Toxicity Reduction Evaluation (TRE), if toxicity persists; or it will indicate that a return to routine toxicity monitoring is justified because persistent toxicity has not been identified by accelerated monitoring. TREs shall be conducted in accordance with the TRE workplan prepared by the Discharger pursuant to Section VI.C.2.a.ii of this Order, below.

- ii. **Toxicity Reduction Evaluations (TRE) Workplan.** The Discharger shall prepare and submit to the Regional Water Board Executive Officer a TRE workplan within 90 days of the effective date of this Order. This plan shall be reviewed at least once every 5 years and updated as necessary in order to remain current and applicable to the discharge and discharge facilities. The Discharger shall notify the Regional Water Board of this review and submit any revision of the TRE workplan with each future Report of Waste Discharge.

The TRE workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include at least the following items:

⁶ This Order does not allow any credit for dilution for the chronic condition. Therefore, a TRE is triggered when the effluent exhibits a pattern of toxicity at 100% effluent.

- a. A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.
 - b. A description of the facility's methods of maximizing in-house treatment efficiency, good housekeeping practices, and a list of all chemicals used in the operation of this Facility.
 - c. If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).
- iii. Toxicity Reduction Evaluations (TRE).** The TRE shall be conducted in accordance with the following:
- a. The TRE shall be initiated within 30 days of the date of completion of the accelerated monitoring test, required by Section V of the MRP, observed to exceed either the acute or chronic toxicity parameter. Failure to conduct required toxicity tests or a TRE within the designated period shall result in appropriate enforcement action.
 - b. The TRE shall be conducted in accordance with the Discharger's workplan.
 - c. The TRE shall be in accordance with current technical guidance and reference material including, at a minimum, the USEPA manual EPA/833B 99/002.
 - d. The TRE may end at any stage if, through monitoring results, it is determined that there is no longer consistent toxicity.
 - e. The Discharger may initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. TIEs shall be conducted in accordance with current technical guidance and reference material, including that, at a minimum, the Discharger shall use the USEPA acute and chronic manuals, EPA/600/6-91/005F (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III).
 - f. As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the source(s) and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with chronic toxicity parameters.
 - g. Many recommended TRE elements accompany required efforts of source control, pollution prevention, and storm water

control programs. TRE efforts should be coordinated with such efforts. To prevent duplication of efforts, evidence of complying with requirements of recommendations of such programs may be acceptable to comply with requirements of the TRE.

- h. The Regional Water Board recognizes that chronic toxicity may be episodic and identification of a reduction of sources of chronic toxicity may not be successful in all cases. Consideration of enforcement action by the Regional Water Board will be based in part on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

b. Discharge Flow Rate Study

The Discharger shall comply with one of the following special study tracks to assure compliance with the Basin Plan's requirement, as described by Section III.F., that discharges to the Russian River and its tributaries receive a minimum dilution of 100 to 1 (receiving water to effluent) at all times during the period when discharges are permitted (October 1 to May 14).

Option 1

- i. By **July 1, 2011**, submit for Executive Officer approval, a workplan for a hydraulic study to determine the ratio of wastewater discharge to receiving water flow at the discharge point in order to ensure compliance with the Basin Plan discharge rate restrictions. The workplan shall include the installation of a continuous instream flow measuring device that will remain in place for future flow monitoring. The workplan proposal shall contain milestones and a time schedule for completion of the study. The study time schedule shall be as short as practicable, and in no case, extend beyond 3 years following the effective date of this Order. The study time schedule shall include provision for the submittal of **semi-annual** progress reports.
- ii. By **July 1, 2012**, submit for Executive Officer approval a report describing the findings and conclusions of the hydraulic study determining the ratio of wastewater discharge to receiving water flow
- iii. If the hydraulic study demonstrates that wastewater discharges exceed a dilution ratio of 100:1, **by September 1, 2012**, the Discharger shall submit a written proposal for Executive Officer approval to study alternatives to comply with the Basin Plan discharge restrictions. The study plan shall be as short as practicable and contain milestones and a time schedule for

selection and implementation of alternative methods. The implementation time schedule shall be as short as practicable and implementation shall be completed no longer than five (5) years from the effective date of this Order.

OR

DRAFT

Option 2

- i. By **July 1, 2011**, submit for Executive Officer approval, a written commitment to modify existing disposal methods in order to ensure compliance with the Basin Plan's discharge rate requirements applicable to the Russian River and its tributaries. The commitment shall include a preliminary schedule of tasks necessary to develop a detailed study plan containing milestones and a time schedule for selection and implementation of an alternative disposal method.
- ii. By **July 1, 2012**, submit for Executive Officer approval a written proposal to study alternatives to comply with the Basin Plan's discharge rate requirements applicable to the Russian River and its tributaries. The study plan shall contain milestones and a time schedule for selection and implementation of an alternative to achieve compliance. The study time schedule shall be as short as practicable but no longer than 5 years from the effective date of this Order.

c. Log Yard Flushing Study / Pond Sizing / BMP Study

The Discharger shall perform a Log Yard Flushing study to assure compliance with the Basin Plan's requirement, as described by Sections III.H and III.I, that discharges from activities associated with logging or construction do not occur in quantities deleterious to beneficial uses. The intent of the study is to ensure the adequacy of the current BMPs in the protection of beneficial uses and to determine the appropriateness of the current monitoring program by establishing a relationship between the volume of flush or amount of rainfall, and the concentrations of pollutants discharging from the pond (e.g., settleable solids, total suspended solids, turbidity, tannins & lignins, EC, COD, color, etc.). The Discharger shall develop and submit a plan for conducting the study by **July 1, 2011** subject to approval by the Regional Water Board Executive Officer. The study shall be performed during the 2011/2012 discharge season and the results of the study shall be submitted to the Regional Water Board by **July 1, 2012**.

d. Groundwater Impact Study

The Discharger shall study the impacts to groundwaters from onsite operations including the boiler operations wastewater disposal and the recycled water pond to assure compliance with the Anti-Degradation Policy and Water Quality Objectives for Groundwaters contained in the Basin Plan. The Discharger shall develop and submit a plan for conducting the study by **July 1, 2011**, subject to approval by the Regional Water Board Executive Officer. The study shall be performed by **January**

1, 2012 and the results of the study shall be submitted to the Regional Water Board by **April 1, 2012**.

3. Best Management Practices and Pollution Prevention

a. Pollutant Minimization Program (PMP)

The Discharger shall, as required by the Executive Officer, develop and conduct a PMP as further described below when there is evidence (e.g., sample results reported as detected, not quantified (DNQ) when the effluent limitation is less than the minimum detection limit (MDL), sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:

- i. A sample result is reported as DNQ and the effluent limitation is less than the RL; or
- ii. A sample result is reported as ND and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in MRP section X.B.4.

The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:

- i. An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;
- ii. Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;
- iii. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant(s) in the effluent at or below the effluent limitation;
- iv. Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and
- v. An annual status report that shall be submitted on March 1st to the Regional Water Board and shall include:
 - (a) All PMP monitoring results for the previous year;
 - (b) A list of potential sources of the reportable priority pollutant(s);
 - (c) A summary of all actions undertaken pursuant to the control strategy; and

(d) A description of actions to be taken in the following year.

b. Debris and Sediment Control Best Management Practices

- i. **BMPs for Woody Material.** The discharge of woody material such as heartwood or sapwood, bark, twigs, branches, wood chips, or sawdust that will pass through a 1.0-inch diameter round opening shall be reduced to the maximum extent practicable by the implementation of BMPs approved by the Executive Officer. By **July 1, 2011** the Discharger shall submit a list of updated BMPs and a recommended monitoring program to the Executive Officer for approval. Once approved, the list of BMPs must be implemented to the maximum extent practicable. The Discharger may seek changes to the list of approved BMPs by submitting a written request for approval by the Executive Officer.
- ii. **BMPs for Turbidity and Sediment.** The Discharger shall reduce the amount of turbidity and sediment to the maximum extent practicable by the implementation of BMPs approved by the Executive Officer. Turbidity is to serve as an indicator parameter for the presence of sediment. By **July 1, 2011** the Discharger shall submit a list of updated BMPs to reduce the discharge of turbidity from the log deck, and a recommended monitoring program to the Executive Officer for approval. The monitoring program shall contain a methodology for measuring turbidity and for establishing that turbidity is functioning as a reliable indicator for the presence of sediment. Once approved, the list of BMPs must be implemented to the maximum extent practicable. The Discharger may seek changes to the list of approved BMPs by submitting a written request for approval by the Executive Officer. This Order may be reopened if the monitoring program indicates that these BMPs do not attain or maintain applicable water quality objectives.

4. Construction, Operation and Maintenance Specifications

- a. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with this Order. Proper operation and maintenance includes adequate laboratory quality control and appropriate quality assurance of procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the Discharger only when necessary to achieve compliance with the conditions of this Order. (40 CFR § 122.41(e).)
- b. The Discharger shall maintain an updated Operation and Maintenance (O&M) Manual for the Facility. The Discharger shall update the O&M Manual, as necessary, to conform to changes in operation and maintenance of the Facility. The O&M Manual shall be readily available to operating personnel onsite for review by state or federal inspectors. The O&M Manual shall include the following:

- i. Description of the treatment facility table of organization showing the number of employees, duties and qualifications and plant attendance schedules (daily, weekends and holidays, part-time, etc). The description should include documentation that the personnel are knowledgeable and qualified to operate the treatment facility so as to achieve the required level of treatment at all times.
 - ii. Detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation and equipment.
 - iii. Description of laboratory and quality assurance procedures.
 - iv. Process and equipment inspection and maintenance schedules.
 - v. Description of safeguards to assure that, should there be reduction, loss, or failure of electric power, the Discharger will be able to comply with requirements of this Order.
 - vi. Description of preventive (fail-safe) and contingency (response and cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. These plans shall identify the possible sources (such as loading and storage areas, power outage, waste treatment unit failure, process equipment failure, tank and piping failure) of accidental discharges, untreated or partially treated waste bypass, and polluted drainage.
- c. Pond Operating Requirements.
 - i. Public contact with wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.
 - ii. Ponds shall be managed to prevent breeding of mosquitoes. In particular,
 - (a) An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface.
 - (b) Weeds shall be minimized, and
 - (c) Vegetation, debris, and dead algae shall not accumulate on the water surface.

5. Special Provisions for Municipal Facilities (POTWs Only) – Not Applicable

6. Other Special Provisions

a. Solids Disposal and Handling Requirements.

- i. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a proper manner approved by the Executive Officer and consistent with the Consolidated Regulations for treatment, storage, Processing, or Disposal of Solid Waste, as set forth in California Code of Regulations, title 27, section 20005, *et seq.* (i.e. at a solid waste facility for which waste discharge requirements have been prescribed by a Regional Water Board). For purposes of this provision:
 - (a) “Woodwaste” includes bark, rock, and/or soil from the surface or perimeter of a log deck.
 - (b) “Waste Piles” include windrows, fills, or dikes of woodwaste wherein visually identifiable material of woody origin may be found at depths greater than one foot below the surface.
 - (c) “Waste Storage” occurs whenever a waste pile remains on the property more than 180 days.
 - (d) “Waste Treatment” includes burning of waste piles.
- ii. The storage of pond sediments shall be done in a manner to prevent nuisance, pollution or impairment of beneficial uses of Hensley Creek.
- iii. Any proposed change in pond sediment or sludge disposal or storage practices shall be reported to the Executive Officer at least 90 days in advance of the change.

7. Compliance Schedules – Not Applicable

VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section IV of this Order will be determined as specified below.

A. General

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

B. Multiple Sample Data

When determining compliance with an AMEL for priority pollutants, and more than one sample result is available, the Discharger shall compute the arithmetic

mean unless the data set contains one or more reported determinations of “Detected, but Not Quantified” (DNQ) or “Not Detected” (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure.

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

C. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

D. Average Weekly Effluent Limitation (AWEL)

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

E. Maximum Daily Effluent Limitation (MDEL)

If a daily discharge (or when applicable, the median determined by subsection B, above, for multiple sample data of a daily discharge) exceeds the MDEL for a

given parameter, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

F. Instantaneous Minimum Effluent Limitation

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

G. Instantaneous Maximum Effluent Limitation

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ), also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean = $\mu = \Sigma x / n$ where: Σx is the sum of the measured ambient water concentrations, and n is the number of samples.

Average Monthly Effluent Limitation (AMEL): the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL): the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Bioaccumulative pollutants are those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

BMPs: means “best management practices.” Best management practices means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of “waters of the United States.” BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Carcinogenic pollutants are substances that are known to cause cancer in living organisms.

Coefficient of Variation (CV) is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Daily Discharge: Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a

day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Debris: The term “debris” means woody material such as bark, twigs, branches, heartwood or sapwood that will not pass through a 2.54 cm (1.0 in) diameter round opening and is present in the discharge from a wet storage facility.

Detected, but Not Quantified (DNQ) are those sample results less than the RL, but greater than or equal to the laboratory’s MDL.

Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Effective Concentration (EC) is a point estimate of the toxicant concentration that would cause an adverse effect on a quantal, “all or nothing,” response (such as death, immobilization, or serious incapacitation) in a given percent of the test organisms. If the effect is death or immobility, the term lethal concentration (LC) may be used. EC values may be calculated using point estimation techniques such as probit, logit, and Spearman-Kärber. EC25 is the concentration of toxicant (in percent effluent) that causes a response in 25 percent of the test organisms.

Effluent Concentration Allowance (ECA) is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake’s Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Estimated Chemical Concentration is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

First runoff-producing storm event: The term “first runoff-producing storm event” means the first precipitation sequence following any log deck sprinkler use meeting all of the following criteria:

1. The precipitation causes overflow from the detention basin to Hensley Creek.
2. Required weekly and monthly analyses are reported for a sample of that overflow.

Inhibition Concentration (IC). The IC25 is typically calculated as a percentage of effluent. It is the level at which the organisms exhibit 25 percent reduction in biological measurement such as reproduction or growth. It is calculated statistically and used in chronic toxicity testing.

Inland Surface Waters are all surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation: the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation: the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Maximum Daily Effluent Limitation (MDEL) means the highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median is the middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is

greater than zero, as defined in title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML) is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

Not Detected (ND) are those sample results less than the laboratory's MDL.

Ocean Waters are the territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Board's California Ocean Plan.

Persistent Pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program (PMP) means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

Reporting Level (RL) is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from

Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Satellite Collection System is the portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

Six-month Median Effluent Limitation: the highest allowable moving median of all daily discharges for any 180-day period.

Source of Drinking Water is any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

Standard Deviation (σ) is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:

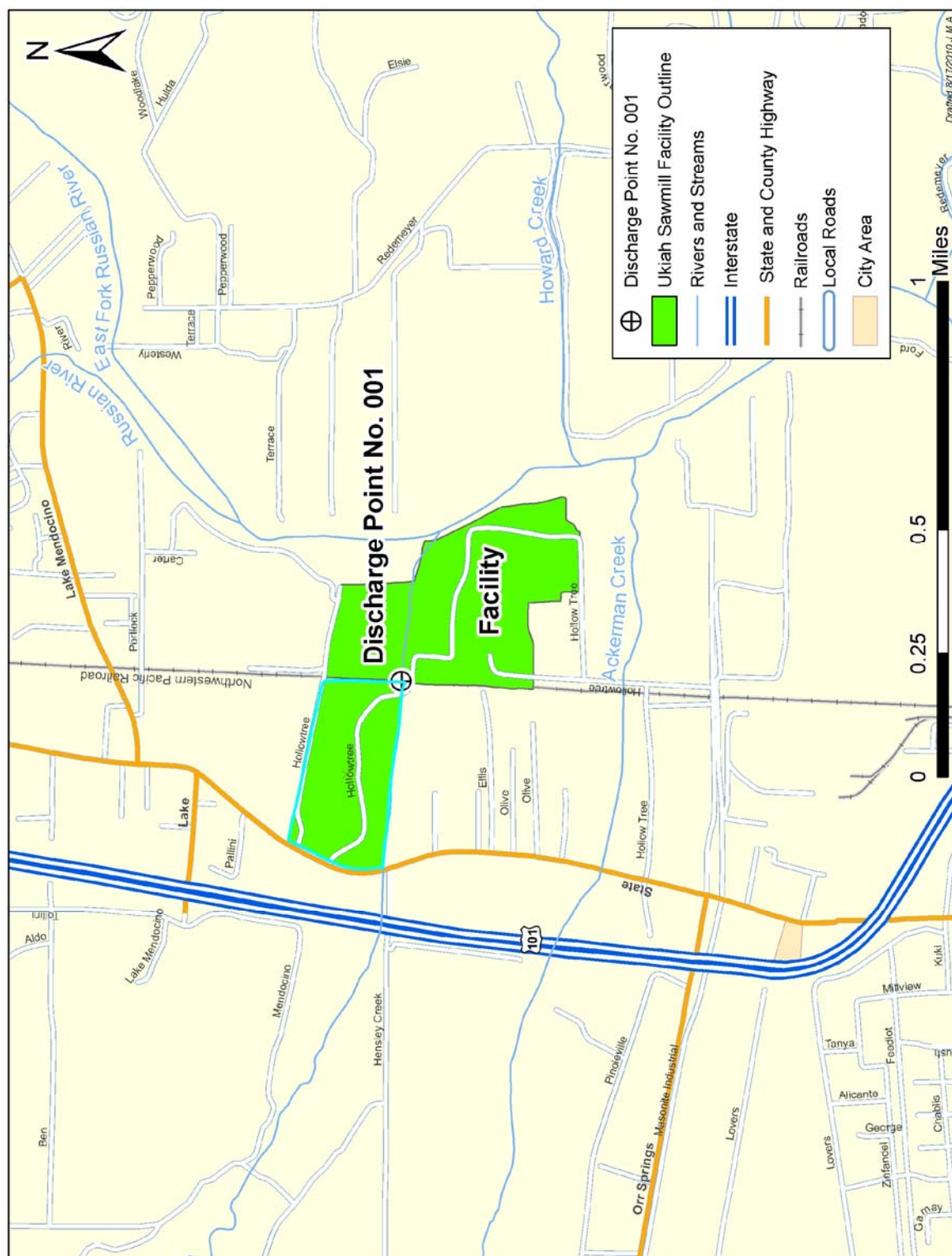
x is the observed value;

μ is the arithmetic mean of the observed values; and

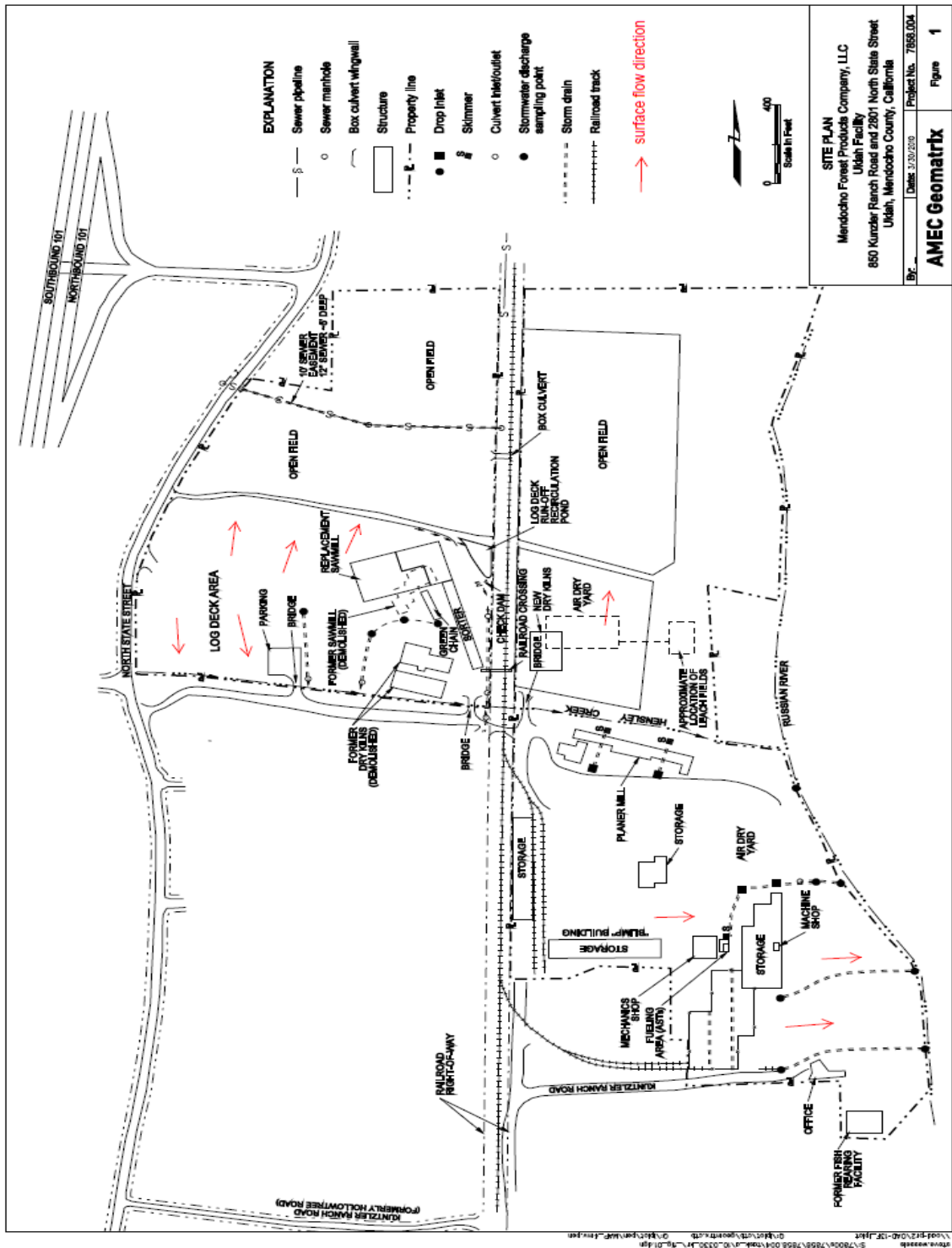
n is the number of samples.

Toxicity Reduction Evaluation (TRE) is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

Attachment B – Map



ATTACHMENT C – FLOW SCHEMATIC



ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).)
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. § 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 C.F.R. § 122.41(i)(1));
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 C.F.R. § 122.41(i)(2));
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 C.F.R. § 122.41(i)(3)); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. § 122.41(i)(4).)

G. Bypass

1. Definitions
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)
 - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)

3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));
 - a. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and
 - b. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.6 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)
4. Burden of Proof. In any enforcement proceeding, the Discharger seeking to establish the bypass defense has the burden of proof.
5. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)
6. Notice
 - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)
 - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. § 122.41(m)(3)(ii).)

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)
2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));
 - b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation

and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. § 122.41(l)(3); § 122.61.)

III. STANDARD PROVISIONS – MONITORING

- A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)
- A.** Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 C.F.R. § 122.41(j)(4); § 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

- A.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)
- B.** Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));
 - 2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));
 - 3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));
 - 4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));
 - 5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and
 - 6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)
- C.** Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):
 - 1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and

2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. § 122.41(k).)
2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 C.F.R. § 122.22(a)(3).)
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));
 - b. All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive

measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 CFR 122.22(a)(1).)

- c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 C.F.R. § 122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.22(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or

sludge reporting form specified by the Regional Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).)

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)
 - b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)
 - c. Violation of a maximum daily discharge limitation for any of the pollutants listed in this Order to be reported within 24 hours [40 CFR § 122.41(l)(6)(ii)(C)]
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

F. Planned Changes

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under 40 CFR 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1). (40 CFR 122.41(l)(1)(ii).)
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in

the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R. § 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 C.F.R. § 122.41(l)(2).)

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 C.F.R. § 122.41(l)(7).)

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

- A.** The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Regional Water Board as soon as they know or have reason to believe (40 CFR 122.42(a)):

- 1.** That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 CFR 122.42(a)(1)):
 - a.** 100 micrograms per liter (µg/L) (40 CFR 122.42(a)(1)(i));
 - b.** 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 CFR 122.42(a)(1)(ii));

- c.** Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 CFR 122.42(a)(1)(iii)); or
 - d.** The level established by the Regional Water Board in accordance with 40 CFR 122.44(f). (40 CFR 122.42(a)(1)(iv).)
- 2.** That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 CFR 122.42(a)(2)):
 - a.** 500 micrograms per liter (µg/L) (40 CFR 122.42(a)(2)(i));
 - b.** 1 milligram per liter (mg/L) for antimony (40 CFR 122.42(a)(2)(ii));
 - c.** Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 CFR 122.42(a)(2)(iii)); or
 - d.** The level established by the Regional Water Board in accordance with section 122.44(f). (40 CFR 122.42(a)(2)(iv).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

Table of Contents

I.	General Monitoring Provisions	E-2
II.	Monitoring Locations	E-3
III.	Influent Monitoring Requirements – Not Applicable	E-3
IV.	Effluent Monitoring Requirements	E-3
A.	Monitoring Location EFF-001	E-3
V.	Whole Effluent Toxicity Testing Requirements	E-5
VI.	Land Discharge Monitoring Requirements – Not Applicable	E-11
VII.	Reclamation Monitoring Requirements – Not Applicable	E-11
VIII.	Receiving Water Monitoring Requirements – Surface Water and Groundwater... ..	E-11
A.	Monitoring Location RSW-001	E-11
B.	Monitoring Location RSW-002	E-12
IX.	Other Monitoring Requirements – Not Applicable	E-12
X.	Reporting Requirements	E-12
A.	General Monitoring and Reporting Requirements	E-12
B.	Self Monitoring Reports (SMRs)	E-13
C.	Discharge Monitoring Reports (DMRs) – Not Applicable	E-16
D.	Other Reports	E-16

List of Tables

Table E-1.	Monitoring Station Locations	E-3
Table E-2.	Effluent Monitoring – Monitoring Location EFF-001	E-3
Table E-3.	Receiving Water Monitoring – Monitoring Location RSW-001	E-11
Table E-5.	Monitoring Periods and Reporting Schedule	E-13
Attachment E-1.	Final Lead Effluent Limitations	E-17
Attachment E-2.	Final Nickel Effluent Limitations	E-19

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations (CFR) at 40 CFR 122.48 requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. California Water Code sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

- A.** Wastewater Monitoring Provision. Composite samples may be taken by a proportional sampling device approved by the Executive Officer or by grab samples composited in proportion to flow. In compositing grab samples, the sampling interval shall not exceed one hour.
- B.** If the Discharger monitors any pollutant more frequently than required by this Order, using test procedures approved by 40 CFR Part 136 or as specified in this Order, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the monthly and annual discharger monitoring reports.
- C.** Laboratories analyzing monitoring samples shall be certified by the California Department of Public Health (CDPH) in accordance with the provisions of Water Code section 13176, and must include quality assurance / quality control data with their analytical reports.
- D.** The Discharger shall develop, maintain and adhere to a standard operating procedure that follows the appropriate Standard Method for any sampling analysis performed by the Discharger for compliance with this order or MRP. Common examples of such analyses include flow, pH, chlorine residual and dissolved oxygen because the holding times for these analyses are sufficiently short that Dischargers often perform the analyses on-site or in the field. Any standard operating procedure kept for such analyses shall include, at a minimum:
 - 1.** Instrument calibration protocols and a log of such calibrations; and
 - 2.** Staff training procedures and a log of such trainings; and
 - 3.** A procedure for taking multiple readings of the same sample for data quality assurance.

II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	Process wastewater from the log deck sprinkler recirculation pond prior to discharge to Hensley Creek.
--	RSW-001	Upstream receiving water monitoring location that is not affected by the discharge, accessible to sampling personnel, and approved by the Executive Officer.
--	RSW-002	Downstream receiving water monitoring location at the end of the pipe where the discharge reaches receiving waters.

III. INFLUENT MONITORING REQUIREMENTS – NOT APPLICABLE

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

The Discharger shall monitor process wastewater from the log deck sprinkler recirculation pond prior to contact with receiving water at Monitoring Location EFF-001. Samples shall be collected of the discharge from the log deck sprinkler recirculation pond during the first hour of each discharge-producing storm event (according to the minimum sampling frequency prescribed in Table E-2), regardless of the regular business hours of the Facility. Samples shall be analyzed as follows:

Table E-2. Effluent Monitoring – Monitoring Location EFF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method ¹
Flow	cfs	Continuous	Daily	Meter
Chemical Oxygen Demand	mg/L	Grab	Monthly: Up to three samples per month ²	Standard Methods
Dissolved Oxygen	mg/L	Grab	Monthly: Up to three samples per month ²	Standard Methods

¹ In accordance with the current edition of the *Standard Methods for Examination of Water and Wastewater* (American Public Health Administration) or current test procedures specified in 40 CFR Part 136.

² Up to three daily samples shall be taken each month commencing with the first hour of discharge each month and terminating when three valid samples have been collected or when the month has ended, whichever occurs first.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method ¹
pH	standard units	Grab	Monthly: Up to three samples per month ²	Standard Methods
Color	Color Units	Grab	Monthly: Up to three samples per month ²	Standard Methods
Temperature	°F or °C	Grab	Monthly: Up to three samples per month ²	Standard Methods
Oil & Grease	mg/L	Grab	Monthly: Up to three samples per month ²	Standard Methods
Total Suspended Solids	mg/L	Grab	Monthly: Up to three samples per month ²	Standard Methods
Settleable Solids	ml/L	Grab	Monthly: Up to three samples per month ²	Standard Methods
Volatile Suspended Solids	mg/L	Grab	Monthly: Up to three samples per month ²	Standard Methods
Turbidity	NTU	Grab	Monthly: Up to three samples per month ²	Standard Methods
Ammonia Nitrogen,(as N) ₃	mg/L	Grab	Twice Annually	Std Method 4130
Nitrate Nitrogen	mg/L	Grab	Twice Annually	Std Method 4130
Nitrite Nitrogen	mg/L	Grab	Twice Annually	Std Method 4130
Organic Nitrogen	mg/L	Grab	Twice Annually	Std Method 4500
Nitrogen, Total (as N)	mg/L	Calculation	Twice Annually	Std Method
Phosphorus, Total (as P)	mg/L	Grab	Twice Annually	Std Method 4130
Lead, Total Recoverable ^{4,5}	µg/L	Grab	Monthly: Up to three samples per month ²	Standard Methods
Mercury, Total Recoverable ⁴	µg/L	Grab	Monthly: Up to three samples per month ²	Standard Methods
Nickel, Total Recoverable ^{4,5}	µg/L	Grab	Monthly: Up to three samples per month ²	Standard Methods
Hardness, Total (as CaCO ₃) ⁵	mg/L	Grab	Monthly: Up to three samples per month ²	Standard Methods
Acute Toxicity ⁶	% Survival	Grab	Once per month	See Section V.A below
Chronic Toxicity ⁶	TUc	Grab	Twice Annually	See Section V.B below
All CTR Pollutants ⁷	µg/L	Grab	Once per permit term ⁸	Standard Methods

³ pH and temperature monitoring must coincide with monthly monitoring for ammonia.

⁴ Analytical methods shall achieve the lowest minimum level (ML) specified in Appendix 4 of the SIP; and in accordance with Section 2.4.1 of the SIP, the Discharger shall report the Reporting Level (RL) and the Method Detection Limit (MDL) with each sample result.

⁵ Monitoring of the effluent for hardness, lead and nickel shall be conducted concurrently with receiving water water monitoring for hardness.

⁶ Whole effluent acute and chronic toxicity shall be monitored in accordance with the requirements of section V of this Monitoring and Reporting Program.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method ¹
Detected CTR Pollutants ⁹	µg/L	Grab	Annually	Standard Methods
Propiconazole	mg/L	Grab	Annually	EPA Method 8081/8082

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Acute Toxicity Testing

The Discharger shall conduct acute whole effluent toxicity testing (WET) to determine compliance with the effluent limitation for acute toxicity established by section IV.A.1 of the Order.

1. **Test Frequency.** The Discharger shall conduct acute WET testing in accordance with the schedule established by this MRP, as summarized in Table E-2, above.
 - a. **Test Failure.** If an acute toxicity test does not meet all test acceptability criteria, as specified in the test method, the Discharger shall re-sample and re-test as soon as possible, not to exceed 7 days following notification of test failure.
 - b. **Accelerated Monitoring.** If the result of any acute toxicity test fails to meet the single test minimum limitation (70 percent survival), and the testing meets all test acceptability criteria, the Discharger shall take two more samples, one within 14 days and one within 21 days following receipt of the initial sample result. If any one of the additional samples do not comply with the three sample median minimum limitation (90 percent survival), the Discharger shall initiate a Toxicity Reduction Evaluation (TRE) in accordance with section VI.C.2.a.ii of the Order. If the two additional samples are in compliance with the acute toxicity requirement and testing meets all test acceptability criteria, then a TRE will not be required. If the discharge stops before additional samples can be collected, the Discharger shall contact the Executive Officer within 21 days with a plan to demonstrate compliance with the effluent limitation.
 - c. **Noncompliance.** Failure to conduct required toxicity tests or a TRE within the designated period shall result in appropriate enforcement action.

⁷ CTR pollutants are those pollutants identified in the California Toxics Rule at 40 CFR 131.38.

⁸ The samples tested for the full set of CTR pollutants shall commence during the first discharge event after the 2011 dry season.

⁹ Detected CTR pollutants are those CTR Pollutants that have been previously detected in the effluent.

2. **Sample Type.** For 96-hour static renewal or 96-hour static non-renewal testing, the effluent samples shall be grab samples collected at Monitoring Location EFF-001. Ammonia, pH, and temperature shall be recorded at 24-hour intervals during the test and shall be reported with the toxicity test results.
3. **Test Species.** Test species for acute WET testing shall be an invertebrate, the water flea, *Ceriodaphnia dubia*, and a vertebrate, the rainbow trout, *Oncorhynchus mykiss*, for at least the first two suites of tests conducted within 12 months after the effective date of the Order. After this screening period, monitoring shall be conducted using the most sensitive species. At least one time every 5 years, the Discharger shall re-screen with the two species described above and continue routine monitoring with the most sensitive species.
4. **Test Methods.** The presence of acute toxicity shall be estimated as specified in Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (USEPA Report No. EPA-821-R-02-012, 5th edition or subsequent editions), or other methods approved by the Executive Officer.

Test procedures related to pH control, sample filtration, aeration, temperature control and sample dechlorination shall be performed in accordance with the USEPA method and fully explained and justified in each acute toxicity report submitted to the Regional Water Board. The control of pH in acute toxicity tests is allowed, provided the test pH is maintained at the effluent pH measured at the time of sample collection, and the control of pH is done in a manner that has the least influence on the test water chemistry and on the toxicity of other pH sensitive materials such as some heavy metals, sulfide and cyanide.

- a. **Test Dilutions.** The acute toxicity test shall be conducted using 100 percent effluent collected at Monitoring Location EFF-001.
- b. **Notification.** The Discharger shall notify the Regional Water Board in writing 14 days after the receipt of test results exceeding the acute toxicity effluent limitation. The notification will describe actions the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by this Order, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.
- c. **Reporting.** Test results for acute toxicity tests shall be reported according to section 12 (Report Preparation) of *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine*

Organisms or in an equivalent format that clearly demonstrates that the Discharger is in compliance with effluent limitations, and other permit requirements.

- d. **Ammonia Toxicity.** The acute toxicity test shall be conducted without modifications to eliminate ammonia toxicity.

B. Chronic Toxicity Testing

The Discharger shall conduct chronic toxicity testing to demonstrate compliance with the Basin Plan's water quality objective for toxicity. The Discharger shall meet the following chronic toxicity testing requirements:

1. **Test Frequency.** The Discharger shall conduct chronic WET testing in accordance with the schedule established by this MRP, as summarized in Table E-2, above, when discharging to surface water.
 - a. **Test Failure.** If either the reference toxicant test or the chronic toxicity test does not meet all test acceptability criteria, as specified in the test method, the Discharger shall re-sample and re-test as soon as possible, not to exceed 14 days following notification of test failure.
 - b. **Accelerated Monitoring Requirements.** If the result of any chronic toxicity test exceeds the chronic toxicity monitoring trigger of 1.0 TUc as specified in section VI.C.2.a. of the Order, and the testing meets all test acceptability criteria, the Discharger shall initiate accelerated monitoring. Accelerated monitoring shall consist of four additional effluent samples – with one test conducted approximately every week over a 4 week period. Testing shall commence within 14 days of receipt of initial sample results which indicated an exceedance of the chronic toxicity trigger. If the discharge will cease before the additional samples can be collected, the Discharger shall contact the Executive Officer within 21 days with a plan to address elevated levels of chronic toxicity in effluent and/or receiving water. The following protocol shall be used for accelerated monitoring and TRE implementation:
 - i. If the results of four consecutive accelerated monitoring tests do not exceed the chronic toxicity trigger of 1.0 TUc, the Discharger may cease accelerated monitoring and resume regular chronic toxicity monitoring. However, if there is adequate evidence of a pattern of effluent toxicity, the Regional Water Board's Executive Officer may require that the Discharger initiate a TRE.
 - ii. If the source(s) of the toxicity is easily identified (i.e. temporary plant upset), the Discharger shall make necessary corrections to the facility

and shall continue accelerated monitoring until four (4) consecutive accelerated tests do not exceed the monitoring “trigger.” Upon confirmation that the chronic toxicity has been removed, the Discharger may cease accelerated monitoring and resume regular chronic toxicity monitoring.

iii. If the result of any accelerated toxicity test exceeds an effluent limitation or monitoring trigger, the Discharger shall cease accelerated monitoring and, within thirty (30) days of the date of completion of the accelerated monitoring test, initiate the TRE Workplan developed in accordance with Section VI.C.2.a.(2) of the Order to investigate the cause(s) and identify corrective actions to reduce or eliminate the chronic toxicity. Within thirty (30) days of completing the TRE Workplan implementation, the Discharger shall submit a report to the Regional Water Board including, at a minimum:

- (a) Specific actions the Discharger took to investigate and identify the cause(s) of toxicity, including a TRE WET monitoring schedule;
- (b) Specific actions the Discharger took to mitigate the impact of the discharge and prevent the recurrence of toxicity;
- (c) Recommendations for further actions to mitigate continued toxicity, if needed; and
- (d) A schedule for implementation of recommended actions.

c. **Noncompliance.** Failure to conduct required toxicity tests or a TRE within the designated period shall result in the establishment of effluent limitations for chronic toxicity or appropriate enforcement action.

2. **Sample Type.** Effluent samples from Monitoring Location EFF-001 shall be grab samples. For toxicity tests requiring renewals, grab samples collected on consecutive days are required.
3. **Test Species.** Test species for chronic WET testing shall be shall be a vertebrate, the fathead minnow, *Pimephales promelas* (larval survival and growth), an invertebrate, the water flea, *Ceriodaphnia dubia* (survival and reproduction test), and a plant, the green algae, *Selanastrum capricornutum* (growth test).
4. **Test Methods.** The presence of chronic toxicity shall be estimated as specified in USEPA’s Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms (USEPA Report No. EPA-821-R-02-013, or subsequent editions).

Test procedures related to pH control, sample filtration, aeration, temperature control and sample dechlorination shall be performed in accordance with the USEPA method and fully explained and justified in each acute toxicity report submitted to the Regional Water Board. The control of pH in chronic toxicity tests is allowed, provided the test pH is maintained at the pH of the receiving water measured at the time of sample collection, and the control of pH is done in a manner that has the least influence on the test water chemistry and on the toxicity of other pH sensitive materials such as some heavy metals, sulfide and cyanide.

- 5. Test Dilutions.** The chronic toxicity test shall be conducted using a series of at least five dilutions and a control. The series shall consist of the following dilution series: 12.5, 25, 50, 75, and 100 percent, and a control. Control and dilution water shall be receiving water collected at an appropriate location upstream of the discharge point. Laboratory water may be substituted for receiving water, as described in the USEPA test methods manual, upon approval by the Executive Officer. If the dilution water used is different from the culture water, a second control using culture water shall be used.
- 6. Reference Toxicant.** If organisms are not cultured in-house, concurrent testing with a reference toxicant shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicant tests also shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).
- 7. Notification.** The Discharger shall notify the Regional Water Board in writing within 14 days after the receipt of test results that indicate an exceedance of the monitoring trigger for chronic toxicity during regular or accelerated monitoring.
- 8. Ammonia Toxicity.** The chronic toxicity test shall be conducted without modifications to eliminate ammonia toxicity.

C. Chronic Toxicity Reporting

- 1. Routine Reporting.** Test results for chronic WET tests shall be reported according to the appropriate acute and chronic guidance manuals and this Monitoring and Reporting Program and shall be attached to the self-monitoring report. Test results shall include, at a minimum, for each test:
 - a. sample date(s)
 - b. test initiation date
 - c. test species

- d. end point values for each dilution (e.g., number of young, growth rate, percent survival)
 - e. NOEC value(s) in percent effluent
 - f. IC15, IC25, IC40, and IC50 values (or EC15, EC25...etc.) in percent effluent
 - g. TUC values (100/NOEC)
 - h. Mean percent mortality (\pm s.d.) after 96 hours in 100 percent effluent (if applicable)
 - i. NOEC and LOEC values for reference toxicant test(s)
 - j. IC50 or EC50 value(s) for reference toxicant test(s)
 - k. Available water quality measurements for each test (e.g., pH, DO, temperature, conductivity, hardness, salinity, ammonia)
 - l. Statistical methods used to calculate endpoints.
 - m. The statistical output page, which includes the calculation of percent minimum significant difference (PMSD).
- 2. Quality Assurance Reporting.** Because the permit requires sublethal hypothesis testing endpoints from methods 1000.0, 1002.0, and 1003.0 in the test methods manual titled Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA-821-R-02-013, 2002), within test variability must be reviewed for acceptability and variability criteria (upper and lower PMSD bounds) must be applied, as directed under section 10.2.8 – Test Variability of the test methods manual. Under section 10.2.8, the calculated PMSD for both reference toxicant test and effluent toxicity test results must be compared with the upper and lower PMSD bounds variability criteria specified in Table 6 – Variability Criteria (Upper and Lower PMSD Bounds) for Sublethal Hypothesis Testing Endpoints Submitted Under NPDES Permits, following the review criteria in paragraphs 10.2.8.2.1 through 10.2.8.2.5 of the test methods manual. Based on this review, only accepted effluent toxicity test results shall be reported.
- 3. Compliance Summary.** The monthly discharger self-monitoring reports shall contain an updated chronology of chronic toxicity test results expressed in TUC, and organized by test species, type of test (survival, growth or reproduction), and monitoring frequency (routine, accelerated, or TRE). The final report shall clearly demonstrate that the Discharger is in compliance with effluent limitations and other permit requirements.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECLAMATION MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

A. Monitoring Location RSW-001

1. The Discharger shall monitor upstream conditions in Hensley Creek at Monitoring Location RSW-001 concurrently with the effluent sampling during the first hour of each discharge-producing storm event (according to the minimum sampling frequency prescribed in Table E-3), regardless of the regular business hours of the Facility. Monitoring at Monitoring Location RSW-001 shall be conducted as follows:

Table E-3. Receiving Water Monitoring – Monitoring Location RSW-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method ¹
Chemical Oxygen Demand	mg/L	Grab	Monthly: Up to three samples per month ²	Standard Methods
Dissolved Oxygen	mg/L	Grab	Monthly: Up to three samples per month ²	Standard Methods
pH	standard units	Grab	Monthly: Up to three samples per month ²	Standard Methods
Color	Color Units	Grab	Monthly: Up to three samples per month ²	Standard Methods
Temperature	°F or °C	Grab	Monthly: Up to three samples per month ²	Standard Methods
Turbidity	NTU	Grab	Monthly: Up to three samples per month ²	Standard Methods
Ammonia Nitrogen, (as N) ³	mg/L	Grab	Twice Annually	Std Method 4130
Nitrate Nitrogen	mg/L	Grab	Twice Annually	Std Method 4130
Nitrite Nitrogen	mg/L	Grab	Twice Annually	Std Method 4130
Organic Nitrogen	mg/L	Grab	Twice Annually	Std Method 4500
Nitrogen, Total (as N)	mg/L	Calculation	Twice Annually	Std Method
Phosphorus, Total (as P)	mg/L	Grab	Twice Annually	Std Method 4130
Hardness, Total (as CaCO ₃) ⁵	mg/L	Grab	Monthly: Up to three samples per month ¹	Standard Methods
Propiconazole	mg/L	Grab	Annually	EPA Method 8081/8082
All CTR Pollutants ⁷	µg/L	Grab	Once per permit term ⁸	Standard Methods
Detected CTR Pollutants ⁹	µg/L	Grab	Annually	Standard Methods

B. Monitoring Location RSW-002

2. The Discharger shall monitor downstream conditions in Hensley Creek at Monitoring Location RSW-002 concurrently with the effluent sampling during the first hour of each discharge-producing storm event (according to the minimum sampling frequency prescribed in Table E-4), regardless of the regular business hours of the Facility. Monitoring at Monitoring Location RSW-002 shall be conducted as follows:

Table E-4. Receiving Water Monitoring – Monitoring Location RSW-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Chemical Oxygen Demand	mg/L	Grab	Monthly: Up to three samples per month ²	Standard Methods
Dissolved Oxygen	mg/L	Grab	Monthly: Up to three samples per month ²	Standard Methods
pH	standard units	Grab	Monthly: Up to three samples per month ²	Standard Methods
Color	Color Units	Grab	Monthly: Up to three samples per month ²	Standard Methods
Temperature	°F or °C	Grab	Monthly: Up to three samples per month ²	Standard Methods
Turbidity	NTU	Grab	Monthly: Up to three samples per month ²	Standard Methods
Hardness, Total (as CaCO ₃) ⁵	mg/L	Grab	Monthly: Up to three samples per month ²	Standard Methods

IX. OTHER MONITORING REQUIREMENTS – NOT APPLICABLE

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. Schedules of Compliance. If applicable, the Discharger shall submit all reports and documentation required by compliance schedules that are established by this Order. Such reports and documentation shall be submitted to the Regional Water Board on or before each compliance date established by this Order. If noncompliance is reported, the Discharger shall describe the reasons for noncompliance and a specific date when compliance will be achieved. The Discharger shall notify the Regional Water Board when

it returns to compliance with applicable compliance dates established by schedules of compliance.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit monthly SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-5. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
Continuous	Permit effective date	All	First day of second calendar month following month of sampling
Daily	Permit effective date	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	First day of second calendar month following month of sampling
Weekly	Sunday following permit effective date or on permit effective date if on a Sunday	Sunday through Saturday	First day of second calendar month following month of sampling
Monthly	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	First day of calendar month through last day of calendar month	First day of second calendar month following month of sampling

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
Quarterly	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January through March April through June July through September October through December	First day of second calendar month following end of quarter
Annually	January 1 following (or on) permit effective date	January 1 through December 31	March 1, each year

- 4. Reporting Protocols.** The Discharger shall report with each sample result the applicable reported Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR Part 136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
- d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

5. The Discharger shall submit SMRs in accordance with the following requirements:
 - a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The reported data shall include calculation of all effluent limitations that require averaging, taking of a median, or other computation. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment. During periods of land discharge and/or reclamation discharge, the reports shall certify "land discharge" and/or "reclamation discharge".
 - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify:
 - i. Facility name and address;
 - ii. WDID number;
 - iii. Applicable period of monitoring and reporting;
 - iv. Violations of the WDRs (identified violations must include a description of the requirement that was violated and a description of the violation);
 - v. Corrective actions taken or planned; and
 - vi. The proposed time schedule for corrective actions.
 - c. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

**Regional Water Quality Control Board
North Coast Region
5550 Skylane Blvd., Suite A
Santa Rosa, CA 95403**

C. Discharge Monitoring Reports (DMRs) – Not Applicable

D. Other Reports

1. The Discharger shall report the results of any special studies, acute and chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan required by Special Provisions – VI.C.2 and 3 of this Order. The Discharger shall submit reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date in compliance with SMR reporting requirements described in subsection X.B.5 above.
2. **Annual Report.** The Discharger shall submit an Annual Report to the Regional Water Board for each calendar year. The report shall be submitted by March 1st of the following year. The report shall, at a minimum, include the following:
 - a. Both tabular and, where appropriate, graphical summaries of the monitoring data and disposal records from the previous year. If the Discharger monitors any pollutant more frequently than required by this Order, using test procedures approved under title 40, section 136 or as specified in this Order, the results of this monitoring shall be included in the calculation and report of the data submitted SMR.
 - b. A comprehensive discussion of the facility's compliance (or lack thereof) with all effluent limitations and other WDRs, and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the Order.

Attachment E-1. Final Lead Effluent Limitations

Hardness ¹ (mg/L as CaCO ₃)	CCC ² 4-Day Average (µg/L)	CMC ³ 1-Hour Average (µg/L)	0.53*CCC ⁴	0.32*CMC ⁴	Lowest LTA ⁵	AMEL ⁶ (µg/L)	MDEL ⁷ (µg/L)
5	0.070	1.8	0.037	0.58	0.037	0.058	0.12
10	0.17	4.4	0.090	1.4	0.090	0.14	0.28
15	0.28	7.3	0.15	2.3	0.15	0.23	0.47
20	0.41	11	0.22	3.4	0.22	0.34	0.68
25	0.54	14	0.29	4.5	0.29	0.45	0.90
30	0.69	18	0.36	5.6	0.36	0.56	1.13
35	0.84	21	0.44	6.9	0.44	0.69	1.38
40	0.99	25	0.53	8.1	0.53	0.81	1.63
45	1.2	30	0.61	9.5	0.61	0.95	1.9
50	1.3	34	0.70	11	0.70	1.1	2.2
55	1.5	38	0.79	12	0.79	1.2	2.4
60	1.7	43	0.88	14	0.88	1.4	2.7
65	1.8	47	0.97	15	0.97	1.5	3.0
70	2.0	52	1.1	17	1.1	1.7	3.3
75	2.2	57	1.2	18	1.2	1.8	3.6
80	2.4	61	1.3	20	1.3	2.0	3.9
85	2.6	66	1.4	21	1.4	2.1	4.3
90	2.8	71	1.5	23	1.5	2.3	4.6
95	3.0	76	1.6	24	1.6	2.4	4.9
100	3.2	82	1.7	26	1.7	2.6	5.2
105	3.4	87	1.8	28	1.8	2.8	5.6
110	3.6	92	1.9	29	1.9	3.0	5.9
115	3.8	98	2.0	31	2.0	3.1	6.3
120	4.0	103	2.1	33	2.1	3.3	6.6
125	4.2	108	2.2	35	2.2	3.5	7.0
130	4.4	114	2.4	36	2.4	3.7	7.3
135	4.7	120	2.5	38	2.5	3.8	7.7
140	4.9	125	2.6	40	2.6	4.0	8.0
145	5.1	131	2.7	42	2.7	4.2	8.4
150	5.3	137	2.8	44	2.8	4.4	8.8
155	5.6	143	2.9	46	2.9	4.6	9.2
160	5.8	149	3.1	48	3.1	4.8	9.5
165	6.0	154	3.2	49	3.2	4.9	9.9
170	6.3	160	3.3	51	3.3	5.1	10
175	6.5	166	3.4	53	3.4	5.3	11
180	6.7	173	3.6	55	3.6	5.5	11
185	7.0	179	3.7	57	3.7	5.7	11
190	7.2	185	3.8	59	3.8	5.9	12
195	7.4	191	3.9	61	3.9	6.1	12
200	7.7	197	4.1	63	4.1	6.3	13
205	7.9	204	4.2	65	4.2	6.5	13
210	8.2	210	4.3	67	4.3	6.7	13
215	8.4	216	4.5	69	4.5	6.9	14
220	8.7	223	4.6	71	4.6	7.1	14

¹ Hardness = hardness of the receiving water at the time the discharge is sampled

² CCC (Criteria Continuous Concentration) = $\text{EXP}(1.273 * (\text{LN}(\text{hardness})) - 4.705$

³ CMC (Criteria Maximum Concentration) = $\text{EXP}(1.273 * (\text{LN}(\text{hardness})) + 1.460$

⁴ Calculated using a coefficient of variation (CV) of 0.60

⁵ LTA = Long-term average

⁶ AMEL (Average Monthly Effluent Limitation) = $1.55 * (\text{minimum } 0.53\text{CCC}, 0.32\text{CMC})$

⁷ MDEL (Maximum Daily Effluent Limitation) = $3.11 * (\text{minimum } 0.53\text{CCC}, 0.32\text{CMC})$

Hardness ¹ (mg/L as CaCO ₃)	CCC ² 4-Day Average (µg/L)	CMC ³ 1-Hour Average (µg/L)	0.53*CCC ⁴	0.32*CMC ⁴	Lowest LTA ⁵	AMEL ⁶ (µg/L)	MDEL ⁷ (µg/L)
225	8.9	229	4.7	73	4.7	7.3	15
230	9.2	236	4.9	75	4.9	7.5	15
235	9.4	242	5.0	78	5.0	7.8	16
240	9.7	249	5.1	80	5.1	8.0	16
245	10	255	5.3	82	5.3	8.2	16
250	10	262	5.4	84	5.4	8.4	17
255	10	269	5.6	86	5.6	8.6	17
260	11	276	5.7	88	5.7	8.8	18
265	11	282	5.8	90	5.8	9.0	18
270	11	289	6.0	93	6.0	9.3	19
275	12	296	6.1	95	6.1	9.5	19
280	12	303	6.3	97	6.3	9.7	19
285	12	310	6.4	99	6.4	9.9	20
290	12	317	6.5	101	6.5	10	20
295	13	324	6.7	104	6.7	10	21
300	13	331	6.8	106	6.8	11	21
310	13	345	7.1	110	7.1	11	22
320	14	359	7.4	115	7.4	11	23
330	15	373	7.7	119	7.7	12	24
340	15	388	8.0	124	8.0	12	25
350	16	402	8.3	129	8.3	13	26
360	16	417	8.6	133	8.6	13	27
370	17	432	8.9	138	8.9	14	28
380	17	447	9.2	143	9.2	14	29
390	18	462	10	148	9.5	15	30
400	19	477	10	153	9.8	15	31
>400	19	477	10	153	9.8	15	31

Attachment E-2. Final Nickel Effluent Limitations

Hardness ⁸ (mg/L as CaCO ₃)	CCC ⁹ 4-Day Average (µg/L)	CMC ¹⁰ 1- Hour Average (µg/L)	0.53*CCC ¹¹	0.32*CMC ⁴	Lowest LTA ¹²	AMEL ¹³ (µg/L)	MDEL ¹⁴ (µg/L)
5	4.1	37	2.2	12	2.2	3.4	6.8
10	7.4	67	3.9	21	3.9	6.1	12
15	10	94	5.6	30	5.6	8.6	17
20	13	120	7.1	38	7.1	11	22
25	16	145	8.6	46	8.6	13	27
30	19	169	10	54	10	15	31
35	21	193	11	62	11	18	35
40	24	216	13	69	13	20	40
45	27	239	14	76	14	22	44
50	29	261	15	84	15	24	48
55	31	283	17	91	17	26	52
60	34	305	18	97	18	28	56
65	36	326	19	104	19	30	60
70	39	347	20	111	20	32	64
75	41	368	22	118	22	34	67
80	43	388	23	124	23	35	71
85	45	409	24	131	24	37	75
90	48	429	25	137	25	39	79
95	50	449	26	144	26	41	82
100	52	469	28	150	28	43	86
105	54	489	29	156	29	45	90
110	57	509	30	163	30	46	93
115	59	528	31	169	31	48	97
120	61	547	32	175	32	50	100
125	63	567	33	181	33	52	104
130	65	586	35	187	35	54	107
135	67	605	36	194	36	55	111
140	69	624	37	200	37	57	114
145	71	642	38	206	38	59	118
150	74	661	39	212	39	60	121
155	76	680	40	218	40	62	125
160	78	698	41	223	41	64	128
165	80	717	42	229	42	65	131
170	82	735	43	235	43	67	135
175	84	753	44	241	44	69	138
180	86	771	45	247	45	70	141
185	88	790	47	253	47	72	145
190	90	808	48	258	48	74	148
195	92	825	49	264	49	75	151
200	94	843	50	270	50	77	155

⁸ Hardness = hardness of the receiving water at the time the discharge is sampled

⁹ CCC (Criteria Continuous Concentration) = $\text{EXP}(0.8460 \cdot (\text{LN}(\text{hardness})) + 0.0584$

¹⁰ CMC (Criteria Maximum Concentration) = $\text{EXP}(0.8460 \cdot (\text{LN}(\text{hardness})) + 2.255$

¹¹ Calculated using a coefficient of variation (CV) of 0.60

¹² LTA = Long-term average

¹³ AMEL (Average Monthly Effluent Limitation) = $1.55 \cdot (\text{minimum } 0.53\text{CCC}, 0.32\text{CMC})$

¹⁴ MDEL (Maximum Daily Effluent Limitation) = $3.11 \cdot (\text{minimum } 0.53\text{CCC}, 0.32\text{CMC})$

Hardness ⁸ (mg/L as CaCO ₃)	CCC ⁹ 4-Day Average (µg/L)	CMC ¹⁰ 1- Hour Average (µg/L)	0.53*CCC ¹¹	0.32*CMC ⁴	Lowest LTA ¹²	AMEL ¹³ (µg/L)	MDEL ¹⁴ (µg/L)
205	96	861	51	276	51	79	158
210	98	879	52	281	52	80	161
215	100	897	53	287	53	82	164
220	102	914	54	293	54	83	168
225	104	932	55	298	55	85	171
230	106	949	56	304	56	87	174
235	107	967	57	309	57	88	177
240	109	984	58	315	58	90	180
245	111	1,001	59	320	59	91	183
250	113	1,019	60	326	60	93	187
255	115	1,036	61	331	61	95	190
260	117	1,053	62	337	62	96	193
265	119	1,070	63	342	63	98	196
270	121	1,087	64	348	64	99	199
275	123	1,104	65	353	65	101	202
280	125	1,121	66	359	66	102	205
285	127	1,138	67	364	67	104	209
290	128	1,155	68	370	68	105	212
295	130	1,172	69	375	69	107	215
300	132	1,188	70	380	70	109	218
310	136	1,222	72	391	72	112	224
320	140	1,255	74	402	74	115	230
330	143	1,288	76	412	76	118	236
340	147	1,321	78	423	78	121	242
350	151	1,354	80	433	80	124	248
360	154	1,387	82	444	82	127	254
370	158	1,419	84	454	84	130	260
380	161	1,452	86	464	86	133	266
390	165	1,484	87	475	87	136	272
400	169	1,516	89	485	89	138	278
>400	169	1,516	89	485	89	138	278

ATTACHMENT F – FACT SHEET

Table of Contents

I.	Permit Information	F-3
II.	Facility Description	F-4
	A. Description of Wastewater and Biosolids Treatment or Controls	F-4
	B. Discharge Points and Receiving Waters	F-5
	C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data	F-5
	D. Compliance Summary	F-6
	E. Planned Changes – Not Applicable	F-6
III.	Applicable Plans, Policies, and Regulations	F-6
	A. Legal Authorities	F-6
	B. California Environmental Quality Act (CEQA)	F-6
	C. State and Federal Regulations, Policies, and Plans	F-6
	D. Impaired Water Bodies on CWA 303(d) List	F-9
	E. Other Plans, Policies and Regulations	F-10
IV.	Rationale For Effluent Limitations and Discharge Specifications	F-10
	A. Discharge Prohibitions	F-11
	B. Technology-Based Effluent Limitations	F-13
	1. Scope and Authority	F-13
	2. Applicable Technology-Based Effluent Limitations	F-14
	C. Water Quality-Based Effluent Limitations (WQBELs)	F-15
	1. Scope and Authority	F-15
	2. Applicable Beneficial Uses and Water Quality Criteria and Objectives	F-16
	3. Determining the Need for WQBELs	F-17
	4. WQBEL Calculations	F-20
	5. Whole Effluent Toxicity (WET)	F-23
	D. Final Effluent Limitations	F-26
	1. Satisfaction of Anti-Backsliding Requirements	F-26
	2. Satisfaction of Antidegradation Policy	F-27
	3. Stringency of Requirements for Individual Pollutants	F-27
	E. Interim Effluent Limitations – Not Applicable	F-29
	F. Land Discharge Specifications – Not Applicable	F-29
	G. Reclamation Specifications – Not Applicable	F-29
V.	Rationale for Receiving Water Limitations	F-29
	A. Surface Water	F-29
	B. Groundwater	F-29
VI.	Rationale for Monitoring and Reporting Requirements	F-29
	A. Influent Monitoring – Not Applicable	F-30
	B. Effluent Monitoring	F-30
	C. Whole Effluent Toxicity Testing Requirements	F-32
	D. Land Discharge Monitoring Requirements – Not Applicable	F-32

E.	Receiving Water Monitoring	F-32
1.	Surface Water	F-32
2.	Groundwater – Not Applicable.....	F-33
F.	Other Monitoring Requirements – Not Applicable.....	F-33
VII.	Rationale for Provisions	F-33
A.	Standard Provisions	F-33
B.	Special Provisions	F-34
VIII.	Public Participation.....	F-38
A.	Notification of Interested Parties.....	F-38
B.	Written Comments.....	F-38
C.	Public Hearing	F-38
D.	Waste Discharge Requirements Petitions	F-39
E.	Information and Copying	F-39
F.	Register of Interested Persons	F-39
G.	Additional Information.....	F-39

List of Tables

Table F-1.	Facility Information.....	F-3
Table F-2.	Historic Effluent Limitations and Monitoring Data	F-5
Table F-3.	Basin Plan Beneficial Uses	F-7
Table F-4.	Summary of Technology-based Effluent Limitations.....	F-15
Table F-5.	Summary of RPA Results	F-20
Table F-6.	Determination of Long Term Averages	F-21
Table F-7.	Determination of Final WQBELs Based on Aquatic Life Criteria.....	F-22
Table F-8.	Determination Final WQBELs Based on Human Health Criteria.....	F-22
Table F-9.	Summary of Water Quality-based Effluent Limitations.....	F-23
Table F-10.	Chronic Toxicity Testing Summary Results	F-25
Table F-11.	Summary of Final Effluent Limitations.....	F-28

ATTACHMENT F – FACT SHEET

As described in Section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for dischargers in California. Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to this Discharger.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	1B80051OMEN
Discharger	Mendocino Forest Products Company, LLC
Name of Facility	Ukiah Sawmill Complex
Facility Address	850 Kunzler Ranch Road
	Ukiah, CA 95482
	Mendocino County
Facility Contact, Title and Phone	Cheryl Moore, Environmental Manager, (707) 485-6740
Authorized Person to Sign and Submit Reports	Dean Kerstetter, Vice-President
Mailing Address	P.O. Box 390
	Capella, CA 95418
	Mendocino County
Billing Address	Same as Mailing Address
Type of Facility	Sawmill (SIC code 2421)
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	B
Pretreatment Program	Not Applicable
Reclamation Requirements	Not Applicable
Facility Permitted Flow	Not Applicable
Facility Design Flow	0.022 million gallons per day (MGD)
Watershed	Russian River Hydrologic Unit, Ukiah Hydrologic Subarea
Receiving Water	Hensley Creek, tributary to the Russian River
Receiving Water Type	Inland surface water

A. The Mendocino Forest Products Company, LLC (hereinafter Discharger) is the owner and operator of the Ukiah Sawmill Complex (hereinafter Facility).

For the purposes of this Order, references to the “discharger” or “permittee” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

- B.** The Facility discharges process water to Hensley Creek, a water of the United States, and is currently regulated by Order No. R1-2002-0086 which was adopted on September 26, 2002. The terms and conditions of the current Order have been automatically continued and remain in effect until new Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit are adopted pursuant to this Order.
- C.** The Discharger filed a Report of Waste Discharge and submitted an application for renewal of its WDRs and NPDES permit on November 13, 2006. Supplemental information was requested on August 10, 2010 and received on August 17, 2010. The permit application was deemed complete on August 17, 2010.

II. FACILITY DESCRIPTION

The Discharger owns and operates a sawmill complex in Ukiah, CA directly adjacent to Hensley Creek. The Facility contains a log yard, sawmill, planer mill, lumber storage, treating facility, flooring facility, and vehicle maintenance shop which support lumber manufacturing, treatment, and storage operations. Storm water runoff from portions of the site, including the log deck, enters the recycle pond and is co-mingled with process flow. Storm water runoff flows co-mingled with process water are described as process water for purposes of this Order. Of the process waters produced at the Facility, log deck sprinkler water is the only process wastewater discharged to Hensley Creek; domestic wastewater and boiler blowdown are discharged to septic tank/leachfield systems onsite.

A. Description of Wastewater and Biosolids Treatment or Controls

Log deck watering operations involve pumping groundwater from onsite wells to a series of sprinklers used to apply moisture to logs. Sprinkler runoff from the log deck is collected and held in a settling pond and periodically recirculated back to the sprinkler system for reuse. During substantial storm events, the pond may overflow and discharge process water to Hensley Creek.

The Facility contains a wood treating system that uses a “spray booth” to apply fungicide to the milled wood. The spray booth is built to capture oversprays and drips; however, propiconazole, a fungicide used at the Facility, has been detected in the process water discharge, suggesting possible overspray or other pollutant transport. The wood is treated and allowed to dry under the roof before being packaged and shipped.

Historically, there were eight drying kilns, each with its own boiler. Many have been taken out of service and only one boiler remains operational. Chemicals are added to the boiler water so that scale does not build up on the pipes.

Approximately 300 gallons of boiler blowdown water is discharged to a septic system onsite per day. Domestic wastes from the mill complex discharge to subsurface septic tank/leach field systems. These wastewaters are not discharged to surface waters.

B. Discharge Points and Receiving Waters

1. During large storm events, overflow from the log deck recirculation pond discharges to Hensley Creek, a water of the United States, at 39° 11' 8" N latitude, 123° 12' 12" W longitude.
2. Boiler blowdown water is discharged to a septic tank/leachfield system on site just north of the drying kiln and south east of the log deck recirculation pond. The boiler water blowdown occurs continuously at approximately 2-4 gallons per hour and for 15 seconds twice per day during the week and once per day on the weekends. The approximate total volume of boiler blowdown is 300 gallons per day.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

1. Effluent limitations contained in Order No. R1-2002-0086 for discharges from Discharge Point No. 001 (Monitoring Location EFF-001) and representative monitoring data from the term of Order No. R1-2002-0086 are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitations		Monitoring Data (April 2003 – January 2010)	
		Average Monthly	Maximum Daily	Average Monthly	Maximum Daily
Acute Toxicity	% Survival	--	³⁰	--	5 ³¹ /50 ³²
Woody Material	--	--	³³	--	--
Turbidity and Sediment	--	--	³⁴	--	1400 ³⁵ /0.4 ³⁶ /790 ³⁷

³⁰ There shall be no acute toxicity in the effluent. The Permittee will be considered in compliance with this limitation when the survival of aquatic organisms in a 96-hour bioassay of undiluted waste complies with the following:

a. Minimum for any one bioassay: 70 percent survival.

b. Median for any three or more consecutive bioassays: at least 90 percent survival.

³¹ Represents minimum observed percent survival.

³² Represents minimum observed median percent survival for three or more consecutive bioassays.

³³ The discharge of woody material such as heartwood or sapwood, bark, twigs, branches, wood chips, or sawdust that will pass through a 1.0-inch diameter round opening shall be reduced to the maximum extent possible by the implementation of BMPs approved by the Executive Officer.

³⁴ The discharge shall be reduce the amount of turbidity and sediment to the maximum extent practicable by the implementation of BMPs approved by the Executive Officer.

³⁵ Maximum observed turbidity grab sample value.

³⁶ Maximum observed settleable solids grab sample value.

³⁷ Maximum observed TSS grab sample value.

Parameter	Units	Effluent Limitations		Monitoring Data (April 2003 – January 2010)	
		Average Monthly	Maximum Daily	Average Monthly	Maximum Daily
pH	standard units	-	6.5 – 8.5	--	6.0 – 7.4

D. Compliance Summary

Between April 2003 and January 2010, the Discharger reported 10 exceedances of their instantaneous minimum effluent limitation for pH. The Discharger also reported three exceedances of acute toxicity limitation for the minimum percent survival for any one bioassay. Review of the acute toxicity reports indicates that there were two nonreporting violations for 2002 and 2003 and three exceedances of the acute toxicity limitation for the median percent survival for any three or more consecutive bioassays. The chronic toxicity testing indicates consistent chronic toxicity for three different organisms on three different days of discharge. The Regional Water Board has not yet adopted any enforcement actions against the Discharger.

E. Planned Changes – Not Applicable

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section. This section provides supplemental information, where appropriate, for the plans, policies, and regulations relevant to the discharge.

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal CWA and implementing regulations adopted by USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as WDRs and a Master Reclamation Permit pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260 and 13520, respectively).

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (CEQA), Public Resources Code sections 21100 through 21177.

C. State and Federal Regulations, Policies, and Plans

- 1. Water Quality Control Plans.** The Regional Water Quality Control Board (Regional Water Board) adopted a *Water Quality Control Plan for the North*

Coast Region (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which establishes State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. The Basin Plan, at page 2-18.00, establishes beneficial uses for groundwater as municipal and domestic supply, industrial service supply, industrial process supply, agricultural supply, and freshwater supply. Thus, beneficial uses applicable to Hensley Creek and groundwater are as follows:

Table F-3. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Hensley Creek, tributary to the Russian River within the Ukiah Hydrologic Subarea of the Russian River Hydrologic Unit	<p><u>Existing:</u></p> <ul style="list-style-type: none"> • Municipal and Domestic Supply (MUN) • Agricultural Supply (AGR) • Industrial Service Supply (IND) • Ground Water Recharge (GWR) • Freshwater Replenishment (FRSH) • Navigation (NAV) • Hydropower Generation (POW) • Water Contact Recreation (REC-1) • Non-Contact Water Recreation (REC-2) • Commercial and Sport Fishing (COMM) • Warm Freshwater Habitat (WARM) • Cold Freshwater Habitat (COLD) • Wildlife Habitat (WILD) • Preservation of Rare, Threatened, or Endangered Species (RARE) • Migration of Aquatic Organisms (MIGR) • Spawning, Reproduction, and/or Early Development (SPWN) <p><u>Potential:</u></p> <ul style="list-style-type: none"> • Industrial Process Supply (PRO) • Shellfish Harvesting (SHELL) • Aquaculture (AQUA)
--	Groundwater	<p><u>Existing</u></p> <ul style="list-style-type: none"> • Municipal and Domestic Supply (MUN) • Industrial Service Supply (IND) • Industrial Process Supply (PRO) • Agricultural Supply (AGR) • Freshwater Replenishment (FRSH)

Requirements of this Order implement the Basin Plan.

- 2. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated

the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

- 3. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
- 4. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 C.F.R. § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
- 5. Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.
- 6. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations³⁸ section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit

³⁸ All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

- 7. Monitoring and Reporting Requirements.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports. The Monitoring and reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided in Attachment E.

D. Impaired Water Bodies on CWA 303(d) List

Section 303(d) of the federal CWA requires states to identify waterbodies that do not meet water quality standards and are not supporting their beneficial uses after implementation of technology-based effluent limitations on point sources. Each state must submit an updated list, the 303(d) List of Impaired Waterbodies, to USEPA by April of each even numbered year. In addition to identifying the waterbodies that are not supporting beneficial uses, the 303(d) list also identifies the pollutant or stressor causing impairment and establishes a schedule for developing a control plan to address the impairment. Total maximum daily loads (TMDLs) may be developed for 303(d) listed pollutant and water body contaminants that establish the maximum quantity of a given pollutant that can be added to a water body from all sources without exceeding the applicable water quality standard for that pollutant and determine wasteload allocations (the portion of a TMDL allocated to existing and future point sources) for point sources and load allocations (the portion of a TMDL attributed to existing and future nonpoint sources) for nonpoint sources.

In June 2007, the USEPA provided final approval of the 303(d) list of impaired water bodies prepared by the State. The list identifies the entire Russian River watershed as impaired by excess sediment and elevated water temperatures. The Regional Water Board expects to adopt TMDLs for sediment and temperature for the Russian River by 2019. Sediment and temperature impairments in the North Coast Region are primarily attributable to nonpoint source discharges associated with certain land use activities. Point source discharges may also contribute to impairments and should be reviewed in that context when a permit is renewed. This Order contains additional requirements to control sediment that constitute early TMDL implementation.

Quantifiable measures of sediment impairing the Russian River include settleable solids, suspended solids, and turbidity. The impact of settleable solids results when they collect on the bottom of a waterbody over time, making them a persistent and accumulative pollutant. The impact of suspended solids and turbidity, by contrast, results from their concentration in the water column.

Analysis of the Discharger's effluent monitoring data during the period of January 2005 through August 2010 indicates that the discharge from this facility, during

periods of high wet weather flows, has exceeded the downstream TSS concentrations three times and the downstream Settleable Solids concentration once. No data has been collected from the receiving waters for turbidity during periods of discharge. The previous Order contained no effluent limitations or upstream monitoring requirements for sediment parameters.

In the previous Order, the Discharger was prohibited from discharging woody debris, where “woody debris” was defined as woody material such as bark, twigs, branches, heartwood, sapwood, or wood chips unable to pass a one-inch diameter round opening. The Discharger was required to develop and implement a set of BMPs designed to reduce the discharge of such materials to the maximum extent practicable. BMP requirements are retained in this Order, but they have been moved to the BMP and Pollution Prevention section of the Special Provisions. In addition, this Order contains new effluent limitations for turbidity, settleable solids and total suspended solids. The BMP requirements and effluent limitations will ensure that the discharge does not contain sediment (e.g., settleable solids, suspended solids, and turbidity) at levels which will cause, have the reasonable potential to cause, or contribute to increases in sediment levels in the Russian River.

E. Discharges to Hensley Creek are not expected to impact the temperature of the receiving water or the Russian River because process water discharges are caused by the comingling of stormwater with process waters, which only occur during storm events in the winter season. Other Plans, Policies and Regulations

1. USEPA promulgated federal regulations for storm water on 16 November 1990 in 40 CFR Parts 122, 123, and 124. The State Water Board adopted Water Quality Order No. 97-03-DWQ, NPDES General Permit No. CAS000001, *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities*, which regulates storm water discharges from timber product processing facilities. Timber product processing facilities are applicable industries under the storm water program and are obligated to comply with the federal regulations. The Facility submitted its NOI to be covered under the State-wide General Storm Water Permit on **March 31, 2010**. Therefore, this Order does not regulate storm water discharges and storm water monitoring requirements included in Order No. R1-2002-0086 have not been retained in this Order.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: section 122.44(a) requires

that permits include applicable technology-based limitations and standards; and section 122.44(d) requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

A. Discharge Prohibitions

- 1. Discharge Prohibition III.A.** The discharge of any waste not disclosed by the Discharger or not within the reasonable contemplation of the Regional Water Board is prohibited.

This prohibition is based on the Basin Plan, the previous permit, and State Water Board Order WQO No. 2002-0012 regarding the petition of WDRs Order No. 01-072 for the East Bay Municipal Utility District and Bay Area Clean Water Agencies. In State Water Board Order No. WQO 2002-0012, the State Water Board found that this prohibition is acceptable in orders, but should be interpreted to apply only to constituents that are either not disclosed by the Discharger, or are not reasonably anticipated to be present in the discharge but have not been disclosed by the Discharger. It specifically does not apply to constituents in the discharge that do not have “reasonable potential” to exceed water quality objectives.

The State Water Board has stated that the only pollutants not covered by this prohibition are those which were “*disclosed to the Ordering and ... can be reasonably contemplated.*” [In re the Petition of East Bay Municipal Utilities District et al., (State Water Board, 2002) Order No. WQO 2002-0012, p. 24] In that Order, the State Water Board cited a case which held the Discharger is liable for the discharge of pollutants “*not within the reasonable contemplation of the permitting authority ...whether spills or otherwise...*” [*Piney Run Preservation Assn. v. County Commissioners of Carroll County, Maryland* (4th Cir. 2001) 268 F. 3d 255, 268.] Thus the State Water Board authority provides that, to be permissible, the constituent discharged (1) must have been disclosed by the Discharger and (2) can be reasonably contemplated by the Regional Water Board.

Whether or not the Discharger reasonably contemplates the discharge of a constituent is not relevant. What matters is whether the Discharger disclosed the constituent to the Regional Water Board or whether the presence of the pollutant in the discharge can otherwise be reasonably contemplated by the Regional Water Board at the time of Order adoption.

- 2. Discharge Prohibition III.B.** Creation of pollution, contamination, or nuisance, as defined by Section 13050 of the California Water Code is prohibited.

This prohibition is based on section 13050 of the Water Code, and has been retained from Order No. R1-2002-0086.

- 3. Discharge Prohibition III.C.** The discharge of domestic waste, treated or untreated, to surface waters is prohibited.

This prohibition is based on the Basin Plan policy on the control of water quality with respect to on-site waste treatment and disposal practices.

- 4. Discharge Prohibition III.D.** The discharge of waste at any point not described in Finding II.B. or authorized by any State Water Board or other Regional Water Board permit is prohibited.

This is a general prohibition that allows the Discharger to discharge waste only in accordance with waste discharge requirements. It is based on Sections 301 and 402 of the federal CWA and CWC Section 13263.

- 5. Discharge Prohibition III.E.** The discharge of wood treatment chemicals or stain control fungicides to surface water or groundwater is prohibited.

This prohibition has been carried over from Order No. R1-2002-0086. As discussed in section II.A of this Fact Sheet, the Facility contains a wood treating system that uses a “spray booth” to apply fungicide to the milled wood. The spray booth is built to capture oversprays and drips; however, propiconazole, a fungicide used at the Facility, has been detected in the effluent from the log deck recirculation pond, suggesting possible runoff of wood treatment chemicals. This prohibition has been included to prevent runoff of wood treatment chemicals to the log deck recirculation pond and ensure that only process water is discharged to the receiving water. This Order continues to require monthly monitoring for propiconazole.

- 6. Discharge Prohibition III.F.** The discharge of process water from the Facility to the Russian River and its tributaries is prohibited during the period of May 15 through September 30 of each year.

The Basin Plan prohibits discharges to the Russian River and its tributaries during the period of May 15 through September 30 (Chapter 4, North Coastal Basin Discharge Prohibition No. 4). The original intent of this prohibition was to prevent the contribution of wastewater to the baseline flow of the Russian River during the period of the year when the Russian River and its tributaries experience the heaviest water-contact recreation use.

- 7. Discharge Prohibition III.G.** During the period from October 1 through May 14, discharges of treated wastewater to Hensley Creek, tributary to the Russian River, shall not exceed one percent of the flow of Hensley Creek as measured at Monitoring Locations RSW-001.

This prohibition is required by the Basin Plan (Chapter 4, North Coastal Basin Discharge Prohibition No. 4) and is retained from the previous order. The Basin Plan prohibits discharges to the Russian River and its tributaries when the waste discharge flow is greater than one percent of the receiving water's flow. Order No. R1-2002-0086 did not contain language specifying how

compliance with the prohibition should be evaluated; therefore, this Order requires a Discharge Flow Rate Study to assess compliance with the Basin Plan and to develop alternatives for each compliance scenario. This Order also requires flow monitoring in the effluent and establishes an upstream monitoring location (i.e., Monitoring Location RSW-001) for future in stream flow monitoring.

- 8. Discharge Prohibition III.H.** The discharge of soil, silt, bark, slash, sawdust, or other organic material from any logging, construction, or associated activity of whatever nature into any stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited.

This prohibition is required by the Basin Plan (Chapter 4, Action Plan for Logging, Construction, and Associated Activities) and is a newly established prohibition in this Order. Water quality based effluent limitations have been established in this Order for total suspended solids and settleable solids and technology based effluent limitations that prohibit the discharge of debris are carried over from the previous permit. Compliance with these effluent limitations should also provide compliance with this discharge prohibition.

- 9. Discharge Prohibition III.I.** The placing or disposal of soil, silt, bark, slash, sawdust, or other organic material from any logging, construction, or associated activity of whatever nature at locations where such material could pass into any stream or watercourse in the basin in quantities which could be deleterious to fish, wildlife, or other beneficial uses is prohibited.

This prohibition is required by the Basin Plan (Chapter 4, Action Plan for Logging, Construction, and Associated Activities) and is a newly established prohibition in this Order. Water quality based effluent limitations have been established in this Order for total suspended solids and settleable solids and technology based effluent limitations that prohibit the discharge of debris are carried over from the previous permit. Compliance with these effluent limitations should also provide compliance with this discharge prohibition.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Effluent Limitations Guidelines and Standards for the Wet Storage Subcategory of the Timber Products Processing Point Source Category (40 CFR Part 429, Subpart I).

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

- Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.
- Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.
- Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the “cost reasonableness” of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and section 125.3 of the Code of Federal Regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in section 125.3.

2. Applicable Technology-Based Effluent Limitations

The Discharger operates a “barking” operation, a “wet deck” log storage operation, and a “sawmills and planing mills” operation. Therefore, effluent limitations established in the Timber Products Processing Point Source Category (40 CFR Part 429) are applicable to the discharge. Specifically, Subpart A (Barking Subcategory), Subpart I (Wet Storage Subcategory), and Subpart K (Sawmills and Planing Mills Subcategory) apply.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT). The following effluent limitations apply to Discharge Point EFF-001:

- a. Barking.** There shall be no discharge of process wastewater into navigable waters.

- b. Sawmills and Planing Mills** - There shall be no discharge of process wastewater pollutants into navigable waters
- c. Wet Storage.** There shall be no debris discharged and the pH shall be within the range of 6.0 to 9.0 at all times. Where, “debris” means woody material such as bark, twigs, branches, heartwood or sapwood that will not pass through a 2.54 cm (1.0 in) diameter round opening and is present in the discharge from a wet storage facility. In the previous Order, the regulation of debris required by the ELGs was included as a prohibition. To be consistent with the applicable ELG, the prohibition of debris has been replaced as an effluent limitation in this Order.

**Summary of Technology-based Effluent Limitations
Discharge Point No. 001**

Table F-4. Summary of Technology-based Effluent Limitations

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Debris	--	--	--	--	³⁹
pH	standard units	--	--	6.0	9.0

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. This Order contains requirements that are necessary to meet applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. A reasonable potential analysis (RPA) demonstrated reasonable potential for discharges from the Facility to cause or contribute to exceedances of chronic toxicity, sediment, lead, mercury, and nickel.

Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water

³⁹ There shall be no debris (as defined in Attachment A) discharged.

quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

- a. Beneficial Uses.** Beneficial use designations for receiving waters for discharges from the Facility are presented in Finding II.H of the Order and section III.C.1 of this Fact Sheet.
- b. Basin Plan Water Quality Objectives.** In addition to the specific water quality objectives indicated above, the Basin Plan contains narrative objectives for color, tastes and odors, floating material, suspended material, settleable material, oil and grease, biostimulatory substances, sediment, turbidity, pH, dissolved oxygen, bacteria, temperature, toxicity, pesticides, chemical constituents, and radioactivity that apply to inland surface waters, enclosed bays, and estuaries, and includes the Russian River and its tributaries. For waters designated for use as domestic or municipal supply (MUN), the Basin Plan establishes as applicable water quality criteria the Maximum Contaminant Levels (MCLs) established by the California Department of Public Health for the protection of public water supplies at title 22 of the California Code of Regulations section 64431 (Inorganic Chemicals) and section 64444 (Organic Chemicals).
- c. SIP, CTR and NTR.** Water quality criteria and objectives applicable to this receiving water are established by the California Toxics Rule (CTR), established by the UPEPA at 40 CFR 131.38; and the National Toxics Rule (NTR), established by the USEPA at 40 CFR 131.36. Criteria for most of the 126 priority pollutants are contained within the CTR and the NTR.
- d.** Aquatic life freshwater and saltwater criteria are identified as criterion maximum concentrations (CMC) and criterion continuous concentrations (CCC). The CTR defines the CMC as the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without deleterious effects and the CCC as the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects. The CMC is used to calculate an acute or 1-hour average numeric effluent limitation and the CCC is used to calculate a chronic or 4-day average numeric effluent limitation. Aquatic life freshwater criteria were used for the RPA, and for the calculation of effluent limitations for lead and nickel.

Human health criteria are further identified as “water and organisms” and “organisms only.” “Water and organism” criteria are designed to address risks to human health from multiple exposure pathways. The criteria from the “water and organisms” column of CTR were used for the RPA because the Basin Plan identifies that the receiving water, Hensley Creek, has the beneficial use designation of municipal and domestic supply. Effluent limitations were not necessary for any constituents based on criteria for the protection of human health.

The SIP, which is described in Finding II.J of the Order and section III.C.3 of the Fact Sheet, includes procedures for determining the need for, and the calculation of WQBELs and requires dischargers to submit data sufficient to do so.

At title 22, Division 4, Chapter 15 of the CCR, CDPH has established Maximum Contaminant Levels (MCLs) for certain pollutants for the protection of drinking water. Chapter 3 of the Basin Plan establishes these MCLs as water quality objectives applicable to receiving waters with the beneficial use designation of municipal and domestic supply.

Attachment F-1 includes a summary of RPA results for all priority toxic pollutants, with water quality criteria/objectives that are applicable to Hensley Creek.

3. Determining the Need for WQBELs

NPDES regulations at 40 CFR 122.44 (d) require effluent limitations to control all pollutants which are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard.

a. Non-Priority Pollutants

- i. **pH.** The effluent limitation for pH of 6.5 to 8.5 is retained from Order No. R1-2002-0086 and applies to discharges to Hensley Creek. This limitation is based on the water quality objective for all surface waters of the North Coast Region established in Chapter 3 of the Basin Plan. The effluent limitation is required because the technology-based requirements prescribed in 40 CFR Part 429 are not sufficient to meet the Basin Plan objective.
- ii. **Sediment Parameters.** The effluent limitations for TSS and Settleable Solids are based on effective water quality objectives in the Basin Plan, including State and federal antidegradation policies (see SWRCB Resolution No. 68-16 and 40 CFR 131.12), and NPDES permitting regulations, including 40 CFR 122.44(d)(1) and 40 CFR 122.4(a). Where baseline water quality is less than the quality defined by the water quality objective, the antidegradation standard requires that water quality must be improved to a level that achieves the water

quality objective (see page 4, Antidegradation policy implementation for NPDES permitting, SWRCB 90-004, Administrative Procedures Update, May 1990). 40 CFR 122.4(a) prohibits issuance of an NPDES permit when permit conditions do not provide for compliance with the CWA, or regulations promulgated under the CWA, including water quality standards and NPDES regulations.

Secondary treatment effluent limitations for sediment parameters are included in this permit, which assume that water quality objectives will be protected by achieving these effluent limitations. This is supported by the conclusions of the Federal Environmental Protection Agency in the sediment TMDLs for the Eel River Watershed, which found that secondary effluent limits for sediment parameters are protective of water quality objectives. Since the Eel River and Russian River listings of sediment impairment were determined in a similar manner and since the two rivers exist in relatively similar hydrologic environments, it is reasonable for early TMDL implementation to apply effluent limitations to Russian River dischargers that are consistent with the conclusions of the Eel River Sediment TMDL analyses. At secondary levels, the discharge of sediment is not expected to further contribute to the sediment impairment.

The effluent limitations for TSS and Settleable Solids are expressed as concentration limits. These limitations are not required by the technology based effluent limitations and are new to the Discharger. Since the discharge is both seasonal and episodic, it doesn't lend itself easily to mass-based limitations. Furthermore, there is insufficient flow data to calculate mass-based limitations. Therefore, this Order expresses effluent limitations for sediment parameters in terms of concentration and requires a Discharge Flow Rate Study, which will facilitate a reevaluation of the appropriateness of mass-based limitations in the future.

iii. Toxicity. See section IV.C.5 below.

b. Priority Pollutants

The SIP establishes procedures to implement water quality criteria from the NTR and CTR and for priority, toxic pollutant objectives established in the Basin Plan. The implementation procedures of the SIP include methods to determine reasonable potential (for pollutants to cause or contribute to excursions above State water quality standards) and to establish numeric effluent limitations, if necessary, for those pollutants showing reasonable potential.

Section 1.3 of the SIP requires the Regional Water Board to use all available, valid, relevant, and representative upstream receiving water and

effluent data and information to conduct an RPA. In this Order, the Regional Water Board has used effluent and receiving water monitoring generated from a sampling event on April 12, 2003 for all of the CTR pollutants. Step 5 of section 1.3 of the SIP requires that ambient background data be used to conduct the RPA, which generally represents upstream receiving water conditions. However, upstream receiving water data was not available for this RPA. Because the only available receiving water monitoring was from the downstream receiving water location (i.e., Monitoring Location RSW-002), downstream monitoring data was used for the RPA. As described in section VI.E.1 of this Fact Sheet, this Order establishes upstream receiving water monitoring at Monitoring Location RSW-001 to determine reasonable potential to cause or contribute to water quality criteria in the future.

Some freshwater water quality criteria are hardness-dependent; i.e., as hardness decreases, the toxicity of certain metals increases, and the applicable water quality criteria become correspondingly more stringent. Hardness-dependent water quality criteria were calculated using a receiving water hardness value of 100 mg/L as CaCO_3 which was also sampled on April 12, 2003.

To conduct the RPA, Regional Water Board staff identified the maximum effluent concentration (MEC) and maximum background (B) concentration for each priority, toxic pollutant from effluent and receiving water data provided by the Discharger, and compared this information to the most stringent applicable water quality criterion (C) for each pollutant with applicable water quality criteria from the NTR, CTR, and the Basin Plan. Section 1.3 of the SIP establishes three triggers for a finding of reasonable potential.

Trigger 1. If the MEC is greater than C, there is reasonable potential, and an effluent limitation is required.

Trigger 2. If B is greater than C, and the pollutant is detected in effluent ($\text{MEC} > \text{ND}$), there is reasonable potential, and an effluent limitation is required.

Trigger 3. After a review of other available and relevant information, a permit writer may decide that a WQBEL is required. Such additional information may include, but is not limited to: the facility type, the discharge type, solids loading analyses, lack of dilution, history of compliance problems, potential toxic impact of the discharge, fish tissue residue data, water quality and beneficial uses of the receiving water, CWA 303 (d) listing for the pollutant, and the presence of endangered or threatened species or their critical habitat.

c. Reasonable Potential Determination

The RPA demonstrated reasonable potential for discharges from the Facility to cause or contribute to exceedances of applicable water quality criteria for lead, mercury, and nickel. Reasonable potential could not be determined for all pollutants, as there are not applicable water quality criteria for all pollutants. The RPA determined that there is either no reasonable potential or there was insufficient information to conclude affirmative reasonable potential for the remainder of the 126 priority pollutants.

The following table summarizes the reasonable potential analysis for each priority pollutant that was reported in detectable concentrations in the effluent or the receiving water (detected values are indicated in bold type). The MECs, most stringent water quality objectives/water quality criteria (WQO/WQCs), and background concentrations (B) used in the RPA are presented, along with the RPA results (Yes or No and which trigger) for each toxic pollutant analyzed. No other pollutants with applicable, numeric water quality criteria from the NTR, CTR, and the Basin Plan were measured above detectable concentrations during the monitoring events conducted by the Discharger. Attachment F-1 to this Order summarizes the RPA for all 126 priority pollutants.

Table F-5. Summary of RPA Results

CTR #	Priority Pollutants	C or Most Stringent WQO/WQC (µg/L)	MEC or Minimum DL (µg/L) ⁴⁰	B or Minimum DL (µg/L) ⁸	RPA Results ⁴¹
1	Antimony	6	1.3	<1.2	No
2	Arsenic	50	2.6	6.1	No
3	Beryllium	4	<0.1	0.24	No
7	Lead	3.2	0.46	7.6	Yes (Trigger 2)
8	Mercury	0.05	0.0165	0.166	Yes (Trigger 2)
9	Nickel	52	5.0	140	Yes (Trigger 2)
10	Selenium	5.0	<0.51	0.7	No
13	Zinc	120	47	63	No

4. WQBEL Calculations

Final WQBELs for lead, mercury, and nickel have been determined using the methods described in Section 1.4 of the SIP.

⁴⁰ The Maximum Effluent Concentration (MEC) or maximum background concentration (B) is the actual detected concentration unless it is preceded by "<", in which case the value shown is the minimum detection level as the analytical result was reported as not detected (ND).

⁴¹ RPA Results:

= Yes, if MEC > WQO/WQC, or B > WQO/WQC and MEC is detected;
= No, if MEC and B are < WQO/WQC or all effluent data are undetected;
= Undetermined (Ud), if no criteria have been promulgated.

Step 1: To calculate the effluent limits, an effluent concentration allowance (ECA) is calculated for each pollutant found to have reasonable potential using the following equation, which takes into account dilution and background concentrations:

$$ECA = C + D (C - B), \text{ where}$$

C = the applicable water quality criterion (adjusted for receiving water hardness and expressed as the total recoverable metal, if necessary)

D = the dilution credit (here D = 0, as the discharge does not qualify for a dilution credit)

B = the background concentration

Because no credit for dilution is being allowed, D=0, and the ECA is equal to the applicable criterion (ECA = C).

Step 2: For each ECA based on an aquatic life criterion/objective (i.e., lead and nickel), the long term average discharge condition (LTA) is determined by multiplying the ECA by a factor (multiplier), which adjusts the ECA to account for effluent variability. The multiplier depends on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for the multipliers based on the values of the CV. CV values were determined for nickel and determined to be 0.60. Derivation of the multipliers is presented in Section 1.4 of the SIP.

From Table 1 of the SIP, the ECA multipliers for calculating LTAs at the 99th percentile occurrence probability are 0.32 (acute multiplier) and 0.53 (chronic multiplier). The LTAs are determined as follows in Table F-6.

Table F-6. Determination of Long Term Averages

Pollutant	ECA		ECA Multiplier		LTA (µg/L)	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Lead	81.6	3.2	0.32	0.53	26	1.7
Nickel	469	52	0.32	0.53	151	28

Step 3: WQBELs, including an average monthly effluent limitation (AMEL) and a maximum daily effluent limitation (MDEL) are calculated using the most limiting (lowest) LTA. The LTA is multiplied by a factor that accounts for averaging periods and exceedance frequencies of the effluent limitations, and for the AMEL, the effluent monitoring frequency. Here the CV is set equal to 0.60, and the sampling frequency is set equal to 4 (n = 4). The 99th percentile occurrence probability was used to determine the MDEL multiplier and a 95th percentile occurrence probability was used to determine the AMEL multiplier. From Table 2 of the SIP, the MDEL multiplier is 3.11, and the AMEL multiplier is 1.55. Final WQBELs are determined as follows.

Table F-7. Determination of Final WQBELs Based on Aquatic Life Criteria

Pollutant	LTA (µg/L)	MDEL Multiplier	AMEL Multiplier	MDEL (µg/L)	AMEL (µg/L)
Lead	1.7	3.1	1.55	5.2	2.6
Nickel	28	3.1	1.55	86	43

The final effluent limits presented above for lead and nickel are based on an effluent hardness of 100 mg/L. Because receiving water hardness can vary, actual effluent limitations will be determined based on measured receiving water hardness at the time that compliance monitoring is performed. Effluent limitations at varying levels of receiving water hardness are presented in Attachments E-1 and E-2 of this Order.

Step 4: When the most stringent water quality criterion/objective is a human health criterion/objective (as for mercury), the AMEL is set equal to the ECA. From Table 2 of the SIP for mercury, when CV = 0.6 and n = 4, the MDEL multiplier at the 99th percentile occurrence probability equals 3.11, and the AMEL multiplier at the 95th percentile occurrence probability equals 1.55. The MDEL for protection of human health is calculated by multiplying the ECA by the ratio of the MDEL multiplier to the AMEL multiplier. Final WQBELs for mercury are determined as follows.

Table F-8. Determination Final WQBELs Based on Human Health Criteria

Pollutant	Units	ECA	MDEL/AMEL	MDEL	AMEL
Mercury	µg/L	0.050	2.01	0.10	0.050

A summary of WQBELs established by the Order is given in the table below. The effluent limitation for pH is based on the Basin Plan water quality objective for pH. The effluent limitations for Lead and Nickel remain hardness-dependent because there is currently not a sufficient data set of the effluent and receiving water hardness values to calculate fixed limits. Monitoring requirements for hardness are included in this Order to facilitate the development of fixed limits in the future.

**Summary of Water Quality-based Effluent Limitations
Discharge Point No. 001**

Table F-9. Summary of Water Quality-based Effluent Limitations

Parameter	Units	Effluent Limitations					
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Minimum Median of Three Consecutive Bioassays
Lead, Total Recoverable	µg/L	42	--	13	--	--	--
Mercury, Total Recoverable	µg/L	0.050	--	0.10	--	--	--
Nickel, Total Recoverable	µg/L	43	--	14	--	--	--
pH	standard units	--	--	--	6.5	8.5	--
Total Suspended Solids	mg/L	30	45	60	--	--	--
Settleable Solids	mL/L	0.1	--	0.2	--	--	--
Acute Toxicity	% Survival	--	--	--	70	--	90
Chronic Toxicity	TUc	1.0	--	--	--	--	--

5. Whole Effluent Toxicity (WET)

Effluent limitations for whole effluent, acute and chronic toxicity, protect the receiving water from the aggregate effect of a mixture of pollutants that may be present in effluent. There are two types of WET tests – acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic test is conducted over a longer period of time and may measure mortality, reproduction, and/or growth.

WET requirements are derived from the CWA and the Basin Plan. The Basin Plan establishes a narrative water quality objective for toxicity that states “*All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, or aquatic life.*” Detrimental responses may include, but are not limited to, decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community

⁴² Effluent limitations for lead are hardness-dependent. See Attachment E-1 for the full table of hardness-dependent lead effluent limitations, which are to be determined based on the hardness of the receiving water at the time the discharge is sampled.

⁴³ Effluent limitations for nickel are hardness-dependent. See Attachment E-2 for the full table of hardness-dependent nickel effluent limitations, which are to be determined based on the hardness of the receiving water at the time the discharge is sampled.

ecology, or receiving water biota. The existing Order contains acute toxicity limitations in accordance with the Basin Plan, which requires that average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests be at least 90 percent, with no single test having less than 70 percent survival. For compliance with the Basin Plan's narrative toxicity objective, this Order requires the Discharger to conduct WET testing for acute and chronic toxicity, as specified in the MRP (Attachment E, section V).

In addition to the Basin Plan requirements, Section 4 of the SIP states that chronic toxicity effluent limitations are required in Orders for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. During the term of Order R1-2002-0086, the Discharger reported chronic toxicity in the effluent on three out of three occasions tested, on all species tested with the highest toxicity reported at >16 TUc. Based on the available information, Regional Water Board staff has determined that discharges from the Facility have the reasonable potential to cause or contribute to chronic toxicity in receiving waters. Therefore in accordance with the SIP, this Order establishes a toxicity effluent limitation of 1.0 TUc. Future chronic toxicity results exceeding 1 TUc will be subject to prompt regulatory enforcement.

a. Acute Aquatic Toxicity

Consistent with Order No. R1-2002-0086, this Order includes an effluent limitation for acute toxicity in accordance with the Basin Plan, which requires that the average survival of test organisms in undiluted effluent for any three consecutive 96-hour bioassay tests be at least 90 percent, with no single test having less than 70 percent survival.

The Order also implements federal guidelines (Regions 9 and 10 Guidelines for Implementing Whole Effluent Toxicity Testing Programs) by requiring the Discharger to conduct acute toxicity tests on a fish species and on an invertebrate to determine the most sensitive species. According to the USEPA manual, *Methods for Estimating the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (EPA/600/4-90/-27F), the acceptable vertebrate species for the acute toxicity test are the fathead minnow, *Pimephales promelas* and the rainbow trout, *Oncorhynchus mykiss*. The acceptable invertebrate species for the acute toxicity test are the water flea, *Ceriodaphnia dubia*, *Daphnia magna*, and *D. pulex*.

Order No. R1-2002-0086 required the Discharger to comply with the Basin Plan narrative toxicity objective by conducting acute toxicity testing using *Oncorhynchus mykiss* as the sole test species. This Order requires the two-suite testing as described above in the first year in order to identify the most sensitive species. Thereafter, the Discharger may continue testing in subsequent years using only the most sensitive species. Over the term of Order No. R1-2002-0086, the Discharger observed three exceedances of the acute toxicity limitation for the minimum of 70 percent survival for

any one bioassay and three exceedances of the acute toxicity limitation for the minimum of 90 percent survival for any three or more consecutive bioassays..

b. Chronic Aquatic Toxicity

The SIP requires the use of short-term chronic toxicity tests to determine compliance with the narrative toxicity objectives for aquatic life in the Basin Plan. The SIP requires that the Discharger demonstrate the presence or absence of chronic toxicity using tests on the fathead minnow, *Pimephales promelas*, the water flea, *Ceriodaphnia dubia*, and the freshwater alga, *Selenastrum capricornutum*. The Discharger's chronic toxicity testing results collected during the term of Order No. R1-2002-0086 are summarized in the table below.

Table F-10. Chronic Toxicity Testing Summary Results

Date	Chronic Toxicity Test	Result (TUC)
16 December 2003	<i>Ceriodaphnia dubia</i> Survival	1.0
16 December 2003	<i>Ceriodaphnia dubia</i> Reproduction	2.0
16 December 2003	<i>Selenastrum capricornutum</i> Survival	>16
16 December 2003	<i>Pimephales promelas</i> Survival	1.0
16 December 2003	<i>Pimephales promelas</i> Growth	1.0
12 January 2004	<i>Ceriodaphnia dubia</i> Survival	1.0
12 January 2004	<i>Ceriodaphnia dubia</i> Reproduction	2.0
12 January 2004	<i>Selenastrum capricornutum</i> Survival	>2.0
19 January 2004	<i>Ceriodaphnia dubia</i> Survival	1.0
19 January 2004	<i>Ceriodaphnia dubia</i> Reproduction	2.0
19 January 2004	<i>Selenastrum capricornutum</i> Survival	8.0

A chronic toxicity effluent limitation has been included in the Order for consistency with the SIP because the collected data indicate that the effluent has reasonable potential to cause, or contribute to chronic toxicity in receiving waters. This Order also specifies use of a numeric trigger for accelerated monitoring and implementation of a Toxicity Reduction Evaluation (TRE) in the event that persistent toxicity is detected.

Attachment E of this Order requires twice annual chronic WET monitoring for demonstration of compliance with the chronic toxicity effluent limitation.

Section V.C.1.g of the MRP requires TUC to be calculated as 100/NOEC for purposes of compliance with the effluent limitation. Although the federal requirements may provide for flexibility in determining how to calculate TUC for compliance purposes (e.g., 100/NOEC, 100/IC25, 100/EC25), USEPA Region IX recommends that effluent limitations and triggers be based on the no observed effect concentration (NOEC) when the permit language and chronic toxicity testing methods incorporate important safeguards that improve the reliability of the NOEC. These safeguards include the use of a dilution series (testing of a series of

effluent concentrations) to verify and quantify a dose-response relationship and a requirement to evaluate specific performance criteria in order to determine the sensitivity of each chronic toxicity test. The goal is to demonstrate that each test is sensitive enough to determine whether or not the effluent is toxic or not.

The use of 100/IC25 or 100/EC25 as methods for calculating chronic toxicity are point estimates that automatically allow for a 25 percent effect before calling an effluent toxic. The Basin Plan has a narrative objective for toxicity that requires that “all waters be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.” Allowance of a possible 25 percent effect would not meet the Basin Plan’s narrative toxicity requirement. In addition, California has historically used the NOEC to regulate chronic toxicity for ocean discharges, thus it is fitting that the same method be used to regulate chronic toxicity in inland surface water discharges.

If sampling of the discharge demonstrates a pattern of toxicity exceeding the effluent limitation, the Discharger is required to initiate a Toxicity Reduction Evaluation (TRE), in accordance with an approved TRE work plan to determine whether the discharge is contributing chronic toxicity to the receiving water. Special Provision VI.C.2.a.ii requires the Discharger to submit to the Regional Water Board and maintain a TRE Work Plan for approval by the Executive Officer, to ensure the Discharger has a plan to immediately move forward with the initial tiers of a TRE, in the event effluent toxicity is encountered in the future. The provision includes requirements for TRE initiation if a pattern of toxicity is demonstrated.

D. Final Effluent Limitations

1. Satisfaction of Anti-Backsliding Requirements

Effluent limitations in this Order are as stringent as the effluent limitations in the previous Order except for the BMP requirements for woody material that will pass through a 1.0-inch diameter round opening, turbidity, and sediment, which were previously identified as effluent limits. These requirements are more appropriate as provisions, and have been removed from the effluent limit category.

CWA section 402(o)(2)(B)(ii) allows for the removal of effluent limitations where technical mistakes or mistaken interpretations of the law were made in issuing the permit. BMP requirements are better categorized as provisions, not effluent limits. Moreover, the requirements still apply and are enforceable. This change will not result in any change or decrease in water quality and anti-backsliding requirements are satisfied.

2. Satisfaction of Antidegradation Policy

This Order is consistent with applicable federal and State antidegradation policies, as it does not authorize the discharge of increased concentrations of pollutants or increased volumes of treated wastewater beyond that which was permitted to discharge in accordance with the previous Order.

Removal of the BMP effluent limitations for woody material that will pass through a 1.0-inch diameter round opening, turbidity, and sediment is also consistent with antidegradation policies because new and more stringent effluent limitations have been developed for these sediment parameters. The Discharger's BMPs will continue to ensure that the discharge of woody material that will pass through a 1.0-inch diameter round opening, turbidity, and sediment are reduced to the maximum extent practicable in the effluent to Hensley Creek.

3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based effluent limitations and WQBELs for individual pollutants. The terms of this Order meet the minimum federal technology-based effluent limitations for the Wet Storage Subcategory of the Timber Products Processing Point Source Category at 40 CFR Part 429, Subpart I. The technology-based effluent limitations consist of restrictions on pH and debris. Restrictions on these pollutants are discussed in section IV.B in this Fact Sheet.

WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to section 131.38. The scientific procedures for calculating the individual WQBELs for priority pollutants are based on the SIP, which was approved by USEPA on May 18, 2000. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21(c)(1). The remaining water quality objectives and beneficial uses implemented by this Order (specifically the addition of the beneficial uses Water Quality Enhancement (WQE), Flood Peak Attenuation/Flood Water Storage (FLD), Wetland Habitat (WET), Native American Culture (CUL), and Subsistence Fishing (FISH)) and the General Objective regarding antidegradation) were approved by USEPA on, March 4, 2005, and are applicable water quality standards pursuant to section 131.21(c)(2). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

Summary of Final Effluent Limitations Discharge Point No. 001

Table F-11. Summary of Final Effluent Limitations

Parameter	Units	Effluent Limitations					Basis ⁴⁴
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Acute Toxicity	% Survival	--	--	--	70 ⁴⁵ /90 ⁴⁶	--	BP
Debris	--	--	--	--	--	⁴⁷	ELG
Lead, Total Recoverable	µg/L	⁴⁸	--	19	--	--	CTR
Mercury, Total Recoverable	µg/L	0.050	--	0.10	--	--	CTR
Nickel, Total Recoverable	µg/L	⁴⁹	--	20	--	--	CTR
pH	standard units	--	--	--	6.5	8.5	BP
Total Suspended Solids	mg/L	30	45	60	--	--	BP
Settleable Solids	mg/L	0.1	--	0.2	--	--	BP
Chronic Toxicity	TUc	1.0		--	--	--	BP

⁴⁴ BP – Based on water quality objectives contained in the Basin Plan.

ELG – Based on the effluent limitation guidelines for industrial dischargers contained in 40 CFR Part 429.

CTR – Based on water quality criteria contained in the California Toxics Rule and applied as specified in the SIP.

⁴⁵ Minimum for any one bioassay.

⁴⁶ Median for any three or more consecutive bioassays.

⁴⁷ There shall be no debris (as defined in Attachment A) discharged.

⁴⁸ Effluent limitations for lead are hardness-dependent. See Attachment E-1 for the full table of hardness-dependent lead effluent limitations, which are to be determined based on the hardness of the receiving water at the time the discharge is sampled.

⁴⁹ Effluent limitations for nickel are hardness-dependent. See Attachment E-1 for the full table of hardness-dependent nickel effluent limitations, which are to be determined based on the hardness of the receiving water at the time the discharge is sampled.

E. Interim Effluent Limitations – Not Applicable

F. Land Discharge Specifications – Not Applicable

G. Reclamation Specifications – Not Applicable

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

CWA section 303(a-c) requires states to adopt water quality standards, including criteria where they are necessary to protect beneficial uses. The Regional Water Board adopted water quality criteria as water quality objectives in the Basin Plan. The Basin Plan states that “[t]he numerical and narrative water quality objectives define the least stringent standards that the Regional [Water] Board will apply to regional waters in order to protect the beneficial uses.” The Basin Plan includes numeric and narrative water quality objectives for various beneficial uses and water bodies. This Order contains Receiving Surface Water Limitations based on the Basin Plan numerical and narrative water quality objectives for biostimulatory substances, bacteria, chemical constituents, color, dissolved oxygen, floating material, oil and grease, pH, pesticides, radioactivity, sediment, settleable material, suspended material, tastes and odors, temperature, toxicity, specific conductance, total dissolved solids, and turbidity.

B. Groundwater

1. The beneficial uses of the underlying ground water are municipal and domestic supply, industrial service supply, industrial process supply, agricultural supply, and freshwater replenishment to surface waters.
2. Groundwater limitations are required to protect the beneficial uses of the underlying groundwater.
3. Discharges from the Facility shall not cause exceedance of applicable water quality objectives or create adverse impacts to beneficial uses of groundwater.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this Facility.

A. Influent Monitoring – Not Applicable

B. Effluent Monitoring

Effluent monitoring requirements from Order No. R1-2001-0086 are retained for chemical oxygen demand (COD), pH, color, oil & grease, total suspended solids (TSS), settleable solids, volatile suspended solids (VSS), turbidity, and propiconazole. New effluent monitoring requirements are included for flow, dissolved oxygen, temperature, ammonia, nitrate, nitrite, organic nitrogen, phosphorous, lead, mercury, nickel and hardness. Monitoring at Monitoring Location EFF-001 is required in order to demonstrate compliance with technology-based effluent limitations, demonstrate compliance with WQBELs, and demonstrate that the discharge does not pose reasonable potential for a pollutant to exceed any numeric or narrative water quality objectives. If the discharge to Hensley Creek is found to contain levels of any pollutant that poses reasonable potential to exceed any numeric or narrative water quality objective, the Regional Water Board would propose to develop effluent limitations for that pollutant(s) for discharges to Hensley Creek. The monitoring frequencies for acute and chronic toxicity have been increased from annual and once per permit term, respectively, to monthly and twice annually because sampling during the previous permit term demonstrated acute and chronic toxicity and noncompliance with both acute toxicity limits. These monitoring requirements enable the Regional Water Board to assess compliance with the effluent limitations contained in this Order and with the Basin Plan's narrative water quality objective for toxicity that is applicable to all receiving waters of the Region.

The following describes changes to the effluent monitoring requirements from Order No. R1-2002-0086 established by this Order.

4. The monitoring requirement for monthly analysis of didecyl dimethyl ammonium chloride (DDAC) has been discontinued in accordance with a June 9, 2006 letter from the Regional Water Board. The Discharger now uses an anti-stain product that does not contain DDAC.
5. The existing effluent monitoring requirement for propiconazole has been retained due to data indicating the presence of this constituent, but the monitoring frequency has been reduced due to the infrequency of detection.
6. Monitoring data collected over the term of Order No. R1-2002-0086 for sediment indicator parameters (TSS and settleable solids), chronic toxicity, lead, mercury, and nickel indicate reasonable potential to exceed water quality criteria. Therefore, monthly effluent monitoring has been established at Monitoring Location EFF-001 to determine compliance with the applicable WQBELs, except chronic toxicity, which has twice annual monitoring with triggers for accelerated monitoring if toxicity exists.
7. A new requirement for effluent flow monitoring has been added to this Order to facilitate compliance determination with Finding III.G of this Order, which

incorporates the Basin Plan requirement that the discharge flow not exceed one percent of the receiving water flow.

8. A new effluent monitoring requirement for dissolved oxygen has been added to this Order to facilitate compliance determination with Receiving Water Limitation V.A.1 of this Order, which incorporates the Basin Plan dissolved oxygen water quality objective.
9. A new effluent monitoring requirement for temperature has been added to this Order to facilitate compliance determination with Receiving Water Limitation V.A.13 of this Order, which incorporates the Basin Plan temperature water quality objective.
10. New effluent monitoring requirements for nutrients (ammonia, nitrate, nitrite, organic nitrogen, total nitrogen and phosphorous) have been added to this Order to facilitate future reasonable potential analyses for these constituents.
11. New effluent monitoring requirements for metals (total recoverable lead, nickel and mercury) have been added to this Order to facilitate compliance determination with the newly established effluent limitations for these constituents.
12. A new requirement for effluent hardness monitoring has been added to this Order. The toxicity of certain metals is hardness dependent (i.e., as hardness decreases, metals toxicity increases). Although the SIP currently requires that receiving water hardness be used to calculate effluent limitations for hardness-based metals, the State Water Board is currently evaluating evidence that more protective effluent limitations may be established utilizing minimum effluent hardness for certain metals. The collection of effluent hardness data will provide a data set to be utilized in the future for the establishment of some effluent limitations.

Monitoring of hardness in the effluent should coincide with compliance monitoring for the hardness-dependent metals with effluent limitations (i.e., lead and nickel) established by this Order.
13. The effluent monitoring frequency for acute toxicity has been increased from annually to monthly in order to provide more information regarding the degree of effluent toxicity and to facilitate a more comprehensive compliance assessment with the acute toxicity effluent limitation because collected data from the last permit indicate the existence of acute toxicity in the effluent.
14. In accordance with Section 1.3 of the SIP, periodic monitoring is required for CTR priority pollutants for which criteria or objectives apply and for which no effluent limitations have been established. Order No. R1-2002-0086 required monitoring for priority pollutants once during the permit term. In order to provide sufficient monitoring to characterize the effluent and conduct a meaningful RPA during the next permit renewal, this Order requires one full

set of priority pollutant sampling during the permit term and annual monitoring of those priority pollutants that have been detected in the effluent.

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) limitations and monitoring requirements are retained from the previous Order and are included in the Order to protect the receiving water quality from the aggregate effect of a mixture of pollutants in the effluent. Acute toxicity testing measures mortality in 100 percent effluent over a short test period and chronic toxicity testing is conducted over a longer time period and may measure mortality, reproduction, and/or growth. This Order includes effluent limitations and monitoring requirements for acute and chronic toxicity.

D. Land Discharge Monitoring Requirements – Not Applicable

E. Receiving Water Monitoring

1. Surface Water

Order No. R1-2002-0086 imposed monitoring requirements on the receiving water downstream of the effluent discharge point at a location that is affected by the discharge and accessible to sampling personnel. Since the Basin Plan does not contain a policy to permit mixing zones, a new downstream receiving water monitoring location (i.e., Monitoring Location RSW-002) has been established at the end of the pipe where the discharge immediately meets the receiving water. A second receiving water monitoring location (i.e., Monitoring Location RSW-001) has been established by this Order upstream of the effluent discharge point at a location that is not influenced by the effluent discharge and is accessible to sampling personnel. The upstream monitoring location is intended to aid in the evaluation of the effects of process wastewater discharge on Hensley Creek and to demonstrate compliance with requirements contained in this Order.

Monitoring requirements from Order No. R1-2002-0086 for COD, pH, color, and propiconazole have been retained in this Order. Monitoring requirements for TSS, settleable solids, and volatile suspended solids, have been eliminated because effluent limitations have been issued and monitoring required for EFF-001. Receiving water monitoring for these constituents will still occur outside of this permit to ensure compliance with the General Industrial Stormwater Permit. Monitoring requirements for dissolved oxygen, turbidity, temperature, hardness, and CTR Priority Pollutants have been added to this Order.

Monitoring for pH is necessary in order to assess compliance with the site-specific pH objectives in Table 3-1 of the Basin Plan. Monitoring of color, TSS, suspended solids, and VSS are necessary to assess compliance with narrative objectives of the Basin Plan. Monitoring of COD and propiconazole is necessary in order to assess compliance with the discharge prohibitions against the discharge of wood treatment chemicals or stain control fungicides to surface waters. The monitoring requirement for monthly analysis of DDAC

has been discontinued in accordance with a 9 June 2006 letter from the Regional Water Board.

The following receiving water monitoring requirements are newly established by this Order.

- a. Monitoring for dissolved oxygen, turbidity and temperature are established by this Order for Monitoring Locations RSW-001 and RSW-002 to determine compliance with the narrative water quality objectives for dissolved oxygen, turbidity and temperature in the Basin Plan.
- b. Because the toxicity of certain metals is hardness dependant (i.e., as hardness decreases, metal toxicity increases), monitoring of hardness in the receiving water, at both monitoring locations, is required. Monitoring of hardness at the upstream and downstream monitoring locations shall coincide with the effluent compliance monitoring for hardness dependent metals (lead and nickel) and priority pollutants.
- c. Propiconazole receiving water monitoring has been eliminated because it will be performed in accordance with the General Industrial Stormwater Permit as described in Finding II.A.
- d. In accordance with Section 1.3 of the SIP, periodic monitoring is required for CTR priority pollutants for which criteria or objectives apply and for which no effluent limitations have been established. Order No. R1-2002-0086 required downstream receiving water monitoring for priority pollutants once during the permit term. In order to provide sufficient monitoring to characterize the upstream receiving water and conduct a meaningful RPA during the next permit renewal, this Order requires complete priority pollutant monitoring of the upstream receiving water once per permit term and annual monitoring of those priority pollutants that have been detected in the effluent.

2. Groundwater – Not Applicable

F. Other Monitoring Requirements – Not Applicable

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

1. Federal Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

Section 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the

permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

2. Regional Water Board Standard Provisions

In addition to the Federal Standard Provisions (Attachment D), the Discharger shall comply with the Regional Water Board Standard Provisions provided in Standard Provisions VI.A.2.

- a. Order Provision VI.A.2.a identifies the State's enforcement authority under the Water Code, which is more stringent than the enforcement authority specified in the federal regulations [e.g. 40 CFR sections 122.41(j)(5) and (k)(2)].
- b. Order Provision VI.A.2.b requires the Discharger to notify Regional Water Board staff, orally and in writing, in the event that the Discharger does not comply or will be unable to comply with any Order requirement. This provision requires the Discharger to make direct contact with a Regional Water Board staff person.
- c. Order Provision VI.A.2.c requires the Discharger to file a petition with, and receive approval from, the State Water Board Division of Water Rights prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse. This requirement is mandated by Water Code section 1211.

B. Monitoring and Reporting Program (MRP) Requirements

1. **Compliance.** The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order.
2. **Alternative Monitoring Locations.** The Discharger may submit a proposal to monitor receiving water at locations different than receiving water locations specified in section VIII of the MRP. The proposal must be received by the Executive Officer within 180 days of the effective date of this Order and specify monitoring locations that are acceptable to the Executive Officer for the purpose of demonstrating compliance with this Order. The Executive Officer will inform the Discharger within 90 days after receipt of the proposal whether the alternative monitoring locations are acceptable.

The Basin Plan does not contain a policy to allow for mixing zones and therefore the downstream receiving water monitoring location has been

changed to the end of pipe where the discharge immediately reaches the receiving waters of Hensley Creek. This finding allows the Discharger to propose an alternative location if it can show that the alternative location does not create an unpermitted mixing zone.

C. Special Provisions

1. Reopener Provisions

- a. Standard Revisions (Special Provisions VI.C.1.a).** Conditions that necessitate a major modification of a permit are described in 40 CFR 122.62, which include the following:
 - i.** When standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision. Therefore, if revisions of applicable water quality standards are promulgated or approved pursuant to Section 303 of the CWA or amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such revised standards.
 - ii.** When new information that was not available at the time of permit issuance would have justified different permit conditions at the time of issuance.
- b. Reasonable Potential (Special Provisions VI.C.1.b).** This provision allows the Regional Water Board to modify, or revoke and reissue, this Order if present or future investigations demonstrate that the Discharger governed by this Permit is causing or contributing to excursions above any applicable priority pollutant criterion or objective or adversely impacting water quality and/or the beneficial uses of the receiving waters.
- c. Whole Effluent Toxicity (Special Provisions VI.C.1.c).** This Order requires the Discharger to investigate the causes of, and identify corrective actions to reduce or eliminate effluent toxicity through a TRE. This Order may be reopened to include a numeric chronic toxicity limitation, a new acute toxicity limitation, and/or a limitation for a specific toxicant identified in the TRE. Additionally, if a numeric chronic toxicity water quality objective is adopted by the State Water Quality Board, this Order may be reopened to include a numeric chronic toxicity limitation based on that objective.
- d. 303(d)-Listed Pollutants (Special Provisions VI.C.1.d).** This provision allows the Regional Water Board to reopen this Order to modify existing effluent limitations or add effluent limitations for pollutants that are the subject of any future TMDL action.
- e. Water Effects Ratios (WERs) and Metal Translators (Special Provisions VI.C.1.e).** This provision allows the Regional Water Board to reopen this Order if future studies undertaken by the Discharger provide

new information and justification for applying a water effects ratio or metal translator to a water quality objective for one or more priority pollutants.

2. Special Studies and Additional Monitoring Requirements

- a. Toxicity Reduction Evaluations (Special Provisions VI.C.2.a).** The SIP requires the use of short-term chronic toxicity tests to determine compliance with the narrative toxicity objectives for aquatic life in the Basin Plan.

In addition to WET monitoring, this provision requires the Discharger to maintain an up-to-date TRE Work Plan for approval by the Executive Officer, to ensure the Discharger has a plan to immediately move forward with the initial tiers of a TRE in the event effluent toxicity is encountered in the future. The TRE is initiated by evidence of a pattern of toxicity demonstrated through the additional effluent monitoring provided as a result of an accelerated monitoring program.

b. Discharge Flow Rate Study

Discharge Point EFF-001 discharges into Hensley Creek that is tributary to the Russian River. The Implementation Plan for the North Coast Basin contained in the Basin Plan on page 4-1, prohibits discharges to the Russian River and its tributaries during periods when the waste discharge flow is greater than one percent of the receiving stream's flow. At this time, little if any information has been documented showing the actual flows from the discharge or in Hensley Creek. However, it is uncertain if the one percent criteria for discharge is being met. In order to comply with applicable regulations, the Discharger shall provide documentation indicating that the discharge is compliance with the Basin Plan's discharge rate requirement, or appropriate for an exception to the Basin Plan requirement or implement modifications that will result in Basin Plan compliance. It is appropriate to provide a reasonable time schedule for the proper evaluation of existing discharges, possible alternatives, and implementation for any necessary modifications.

c. Log Yard Flushing Study

The Discharger shall develop a plan for conducting a Log yard Flushing study, to be approved by the Regional Water Board Executive Officer. The Plan shall be submitted to the Regional Water Board by July 1, 2011. The intent of the study is to establish the relationship between the volume of flush or amount of rainfall, and the concentrations of pollutants (e.g., tannins & lignins, pH, EC, COD, TSS, settleable solids, and turbidity, etc.) as well as to assess if the current monitoring and reporting program is sufficient to characterize the process water discharge. Results of the study must be submitted to the Regional Water Board by July 1, 2012.

d. Groundwater Impact Study

The Discharge of boiler blowdown water has the potential to impact groundwater quality, but at this point little or no information has been collected to assess compliance with groundwater quality objectives in the Basin Plan. In order to comply with applicable regulations, the Discharger shall provide documentation indicating that the discharge is compliance with the Basin Plan's groundwater quality objectives. It is appropriate to provide a reasonable time schedule for the proper evaluation of existing discharges, possible alternatives, and implementation for any necessary modifications.

3. Best Management Practices and Pollution Prevention

- a. Pollutant Minimization Plan (Special Provisions VI.C.3.a).** Section VI.C.3.a is included in this Order as required by section 2.4.5 of the SIP. The Regional Water Board includes standard provisions in all NPDES permits requiring development of a Pollutant Minimization Program when there is evidence that a toxic pollutant is present in the effluent at a concentration greater than an applicable effluent limitation.
- b. Debris and Sediment BMPs (Special Provisions VI.C.3.b and VI.C.3.c).** Order No. R1-2002-0086 also required effluent limitations, in the form of BMPs, for woody material that will pass through a 1.0-inch diameter round opening to further eliminate discharges of sawdust to the receiving water and for turbidity and sediment to minimize discharges of these constituents to the receiving water. It is not feasible to require numeric effluent limitations for these parameters; therefore, in accordance with 40 CFR 122.41(k)(3) and consistent with Order No. R1-2002-0086, this Order requires implementation of BMPs to eliminate discharges of sawdust and minimize discharges of turbidity and sediment.

4. Construction, Operation, and Maintenance Specifications

- a. Operation and Maintenance (Special Provisions VI.C.4.a and VI.C.4.b).** Section 122.41(e) of 40 CFR requires proper operation and maintenance of permitted wastewater systems and related facilities to achieve compliance with permit conditions. An up-to-date operation and maintenance manual, as required by Provision VI.C.4.b of the Order, is an integral part of a well-operated and maintained facility.

5. Special for Municipal Facilities (POTWs Only) – Not Applicable

6. Other Special Provisions

- a. Solids Disposal and Handling Requirements (Special Provisions VI.C.6.a).** Consistent with Order No. R1-2002-0086, this Order includes solids disposal and handling requirements to ensure that solids removed from liquid wastes are disposed at a solid waste facility for which WDRs have been prescribed by the Regional Water Board.

7. Compliance Schedules – Not Applicable

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, North Coast Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for Mendocino Forest Products Company, LLC, Ukiah Sawmill Complex. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the following posting on the Regional Water Board's Internet site at: http://www.waterboards.ca.gov/northcoast/public_notices/public_hearings/npdes_permits_and_wdrs.shtml and through publication in the Press Democrat on **September 24, 2010**.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by 5:00 p.m. on **October 25, 2010**.

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date:	December 9, 2010
Time:	8:30 a.m.
Location:	Regional Water Board Office, Board Hearing Room 5550 Skylane Boulevard, Suite A Santa Rosa, CA 95403

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and

permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is <http://www.waterboards.ca.gov/northcoast> where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (707) 576-2220.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Kason Grady at kgrady@waterboards.ca.gov or (707) 576-2682.

ATTACHMENT F-1

CTR No.	Constituent name	C ⁵⁰ (µg/L)	Step 2	Step 3				Step 5					Final Result	
			Effluent Data Available (Y/N)?	Are all data points ND ⁵¹ (Y/N)	If all data points ND, enter the MDL ⁵² (µg/L)	Enter the pollutant effluent detected max conc (µg/L)	Pollutant Concentration ⁵³	B Available (Y/N)?	Are all B data points ND (Y/N)?	If all data points ND, enter the MDL (µg/L)	Enter the pollutant B detected max conc (µg/L)	If all B is ND, is MDL>C?	RPA Result	Reason ⁵⁴
1	Antimony	6	Y	N		1.3	1.3	Y	Y	1.2		N	No	Ud; MEC<C & B is ND
2	Arsenic	50	Y	N		2.6	2.6	Y	N		6.1		No	MEC<C & B<C
3	Beryllium	4	Y	Y	0.1		0.1	Y	N		0.24		No	MEC<C & B<C
4	Cadmium	2.5	Y	Y	0.2		0.2	Y	Y	0.2		N	No	Ud; MEC<C & B is ND
5a	Chromium (III)	207	N					N					Ud	no effluent data & no B
5b	Chromium (VI)	11	Y	Y	5		5	Y	Y	5		N	No	Ud; MEC<C & B is ND
6	Copper	9.3	Y	Y	1		1	Y	Y	1		N	No	Ud; MEC<C & B is ND
7	Lead	3.2	Y	N		0.46	0.46	Y	N		7.6		Yes	B>C
8	Mercury	0.050	Y	N		0.0165	0.0165	Y	N		0.166		Yes	B>C
9	Nickel	52	Y	N		5	5	Y	N		140		Yes	B>C
10	Selenium	5.0	Y	Y	0.51		0.51	Y	N		0.7		No	MEC<C & B<C
11	Silver	4.1	Y	Y	1.6		1.6	Y	Y	1.6		N	No	Ud; MEC<C & B is ND
12	Thallium	1.7	Y	Y	0.36		0.36	Y	Y	0.36		N	No	Ud; MEC<C & B is ND
13	Zinc	120	Y	N		47	47	Y	N		63		No	MEC<C & B<C
14	Cyanide	5.2	Y	Y	2		2	Y	Y	2		N	No	Ud; MEC<C & B is ND
15	Asbestos	7.0	Y	Y	0.021		0.021	Y	Y	0.021		N	No	Ud; MEC<C & B is ND
16	2,3,7,8 TCDD	1.3E-08	Y	Y	2.2E-06			Y	Y	0.0000019		Y	No	UD; effluent data and B are ND
17	Acrolein	320	Y	Y	0.17		0.17	Y	Y	0.17		N	No	Ud; MEC<C & B is ND
18	Acrylonitrile	0.06	Y	Y	0.21			Y	Y	0.21		Y	No	UD; effluent data and B are ND
19	Benzene	1.0	Y	Y	0.15		0.15	Y	Y	0.15		N	No	Ud; MEC<C & B is ND
20	Bromoform	4.3	Y	Y	0.079		0.079	Y	Y	0.079		N	No	Ud; MEC<C & B is ND
21	Carbon Tetrachloride	0.25	Y	Y	0.11		0.11	Y	Y	0.11		N	No	Ud; MEC<C & B is ND
22	Chlorobenzene	70	Y	Y	0.16		0.16	Y	Y	0.16		N	No	Ud; MEC<C & B is ND
23	Chlorodibromomethane	0.40	Y	Y	0.11		0.11	Y	Y	0.11		N	No	Ud; MEC<C & B is ND
24	Chloroethane	No Criteria	Y	Y	0.28		No Criteria	Y	Y	0.28		N	Uo	No Criteria
25	2-Chloroethylvinyl ether	No Criteria	N				No Criteria	N					Uo	No Criteria
26	Chloroform	No Criteria	Y	Y	0.19		No Criteria	Y	Y	0.19		N	Uo	No Criteria

⁵⁰ C = the lowest (i.e., most stringent) water quality criterion.

⁵¹ ND = non-detect

⁵² MDL = minimum detection limit

⁵³ Maximum effluent concentration (MEC) is the maximum detected effluent concentration. If all data points are non-detect and the MDL is less than C, then the MEC equals the MDL.

⁵⁴ UD = undetermined

CTR No.	Constituent name	C ⁵⁰ (µg/L)	Step 2	Step 3				Step 5					Final Result	
			Effluent Data Available (Y/N)?	Are all data points ND ⁵¹ (Y/N)	If all data points ND, enter the MDL ⁵² (µg/L)	Enter the pollutant effluent detected maxi conc (µg/L)	Pollutant Concentration ⁵³	B Available (Y/N)?	Are all B data points ND (Y/N)?	If all data points ND, enter the MDL (µg/L)	Enter the pollutant B detected max conc (µg/L)	If all B is ND, is MDL>C?	RPA Result	Reason ⁵⁴
27	Dichlorobromomethane	0.56	Y	Y	0.12		0.12	Y	Y	0.12		N	No	Ud;MEC<C & B is ND
28	1,1-Dichloroethane	5.0	Y	Y	0.21		0.21	Y	Y	0.21		N	No	Ud;MEC<C & B is ND
29	1,2-Dichloroethane	0.38	Y	Y	0.28		0.28	Y	Y	0.28		N	No	Ud;MEC<C & B is ND
30	1,1-Dichloroethylene	0.057	Y	Y	0.22			Y	Y	0.22		Y	No	UD; effluent data and B are ND
31	1,2-Dichloropropane	0.52	Y	Y	0.11		0.11	Y	Y	0.11		N	No	Ud;MEC<C & B is ND
32	1,3-Dichloropropylene	0.50	Y	Y	0.22		0.22	Y	Y	0.22		N	No	Ud;MEC<C & B is ND
33	Ethylbenzene	300	Y	Y	0.12		0.12	Y	Y	0.12		N	No	Ud;MEC<C & B is ND
34	Methyl Bromide	48	Y	Y	0.28		0.28	Y	Y	0.28		N	No	Ud;MEC<C & B is ND
35	Methyl Chloride	No Criteria	Y	Y	0.36		No Criteria	Y	Y	0.36		N	Uo	No Criteria
36	Methylene Chloride	4.7	Y	Y	0.14		0.14	Y	Y	0.14		N	No	Ud;MEC<C & B is ND
37	1,1,2,2-Tetrachloroethane	0.17	Y	Y	0.081		0.081	Y	Y	0.081		N	No	Ud;MEC<C & B is ND
38	Tetrachloroethylene	0.80	Y	Y	0.16		0.16	Y	Y	0.16		N	No	Ud;MEC<C & B is ND
39	Toluene	150	Y	Y	0.13		0.13	Y	Y	0.13		N	No	Ud;MEC<C & B is ND
40	1,2-Trans-Dichloroethylene	10	Y	Y	0.17		0.17	Y	Y	0.17		N	No	Ud;MEC<C & B is ND
41	1,1,1-Trichloroethane	200	Y	Y	0.12		0.12	Y	Y	0.12		N	No	Ud;MEC<C & B is ND
42	1,1,2-Trichloroethane	0.60	Y	Y	0.11		0.11	Y	Y	0.11		N	No	Ud;MEC<C & B is ND
43	Trichloroethylene	2.7	Y	Y	0.18		0.18	Y	Y	0.18		N	No	Ud;MEC<C & B is ND
44	Vinyl Chloride	0.50	Y	Y	0.43		0.43	Y	Y	0.43		N	No	Ud;MEC<C & B is ND
45	2-Chlorophenol	120	Y	Y	5		5	Y	Y	5		N	No	Ud;MEC<C & B is ND
46	2,4-Dichlorophenol	93	Y	Y	5		5	Y	Y	5		N	No	Ud;MEC<C & B is ND
47	2,4-Dimethylphenol	540	Y	Y	2		2	Y	Y	2		N	No	Ud;MEC<C & B is ND
48	2-Methyl- 4,6-Dinitrophenol	13	Y	Y	5		5	Y	Y	5		N	No	Ud;MEC<C & B is ND
49	2,4-Dinitrophenol	70	Y	Y	5		5	Y	Y	5		N	No	Ud;MEC<C & B is ND
50	2-Nitrophenol	No Criteria	Y	Y	10		No Criteria	Y	Y	10		N	Uo	No Criteria
51	4-Nitrophenol	No Criteria	Y	Y	10		No Criteria	Y	Y	10		N	Uo	No Criteria
52	3-Methyl 4-Chlorophenol	No Criteria	Y	Y	1		No Criteria	Y	Y	1		N	Uo	No Criteria
53	Pentachlorophenol	0.28	Y	Y	5			Y	Y	5		Y	No	UD; effluent data and B are ND
54	Phenol	21,000	Y	Y	1		1	Y	Y	1		N	No	Ud;MEC<C & B is ND
55	2,4,6-Trichlorophenol	2.1	Y	Y	10			Y	Y	10		Y	No	UD; effluent data and B are ND
56	Acenaphthene	1,200	Y	Y	1		1	Y	Y	1		N	No	Ud;MEC<C & B is ND
57	Acenaphthylene	No Criteria	Y	Y	10		No Criteria	Y	Y	10		N	Uo	No Criteria
58	Anthracene	9,600	Y	Y	10		10	Y	Y	10		N	No	Ud;MEC<C & B is ND
59	Benzidine	0.00012	Y	Y	5			Y	Y	5		Y	No	UD; effluent data and B are ND
60	Benzo(a)Anthracene	0.0044	Y	Y	10			Y	Y	10		Y	No	UD; effluent data and B are ND
61	Benzo(a)Pyrene	0.0044	Y	Y	10			Y	Y	10		Y	No	UD; effluent data and B are ND
62	Benzo(b)Fluoranthene	0.0044	Y	Y	10			Y	Y	10		Y	No	UD; effluent data and B are ND
63	Benzo(ghi)Perylene	No Criteria	Y	Y	5		No Criteria	Y	Y	5		N	Uo	No Criteria
64	Benzo(k)Fluoranthene	0.0044	Y	Y	10			Y	Y	10		Y	No	UD; effluent data and B are ND
65	Bis(2-Chloroethoxy)Methane	No Criteria	Y	Y	5		No Criteria	Y	Y	5		N	Uo	No Criteria
66	Bis(2-Chloroethyl)Ether	0.031	Y	Y	1			Y	Y	1		Y	No	UD; effluent data and B are ND
67	Bis(2-Chloroisopropyl)Ether	1,400	Y	Y	2		2	Y	Y	2		N	No	Ud;MEC<C & B is ND
68	Bis(2-Ethylhexyl)Phthalate	1.8	Y	Y	5			Y	Y	5		Y	No	UD; effluent data and B are ND
69	4-Bromophenyl Phenyl Ether	No Criteria	Y	Y	5		No Criteria	Y	Y	5		N	Uo	No Criteria
70	Butylbenzyl Phthalate	3,000	Y	Y	10		10	Y	Y	10		N	No	Ud;MEC<C & B is ND
71	2-Chloronaphthalene	1,700	Y	Y	10		10	Y	Y	10		N	No	Ud;MEC<C & B is ND
72	4-Chlorophenyl Phenyl Ether	No Criteria	Y	Y	5		No Criteria	Y	Y	5		N	Uo	No Criteria

CTR No.	Constituent name	C ⁵⁰ (µg/L)	Step 2	Step 3				Step 5					Final Result	
			Effluent Data Available (Y/N)?	Are all data points ND ⁵¹ (Y/N)	If all data points ND, enter the MDL ⁵² (µg/L)	Enter the pollutant effluent detected maxi conc (µg/L)	Pollutant Concentration ⁵³	B Available (Y/N)?	Are all B data points ND (Y/N)?	If all data points ND, enter the MDL (µg/L)	Enter the pollutant B detected max conc (µg/L)	If all B is ND, is MDL>C?	RPA Result	Reason ⁵⁴
73	Chrysene	0.0044	Y	Y	10			Y	Y	10		Y	No	UD; effluent data and B are ND
74	Dibenzo(a,h)Anthracene	0.0044	Y	Y	10			Y	Y	10		Y	No	UD; effluent data and B are ND
75	1,2-Dichlorobenzene	600	Y	Y	0.077		0.077	Y	Y	0.077		N	No	UD;MEC<C & B is ND
76	1,3-Dichlorobenzene	400	Y	Y	0.15		0.15	Y	Y	0.15		N	No	UD;MEC<C & B is ND
77	1,4-Dichlorobenzene	5.0	Y	Y	0.12		0.12	Y	Y	0.12		N	No	UD;MEC<C & B is ND
78	3,3 Dichlorobenzidine	0.040	Y	Y	5			Y	Y	5		Y	No	UD; effluent data and B are ND
79	Diethyl Phthalate	23,000	Y	Y	2		2	Y	Y	2		N	No	UD;MEC<C & B is ND
80	Dimethyl Phthalate	313,000	Y	Y	2		2	Y	Y	2		N	No	UD;MEC<C & B is ND
81	Di-n-Butyl Phthalate	2,700	Y	Y	10		10	Y	Y	10		N	No	UD;MEC<C & B is ND
82	2,4-Dinitrotoluene	0.110	Y	Y	5			Y	Y	5		Y	No	UD; effluent data and B are ND
83	2,6-Dinitrotoluene	No Criteria	Y	Y	5		No Criteria	Y	Y	5		N	Uo	No Criteria
84	Di-n-Octyl Phthalate	No Criteria	Y	Y	10		No Criteria	Y	Y	10		N	Uo	No Criteria
85	1,2-Diphenylhydrazine	0.040	Y	Y	1			Y	Y	1		Y	No	UD; effluent data and B are ND
86	Fluoranthene	300	Y	Y	1		1	Y	Y	1		N	No	UD;MEC<C & B is ND
87	Fluorene	1,300	Y	Y	10		10	Y	Y	10		N	No	UD;MEC<C & B is ND
88	Hexachlorobenzene	0.00075	Y	Y	1			Y	Y	1		Y	No	UD; effluent data and B are ND
89	Hexachlorobutadiene	0.44	Y	Y	1			Y	Y	1		Y	No	UD; effluent data and B are ND
90	Hexachlorocyclopentadiene	50	Y	Y	5		5	Y	Y	5		N	No	UD;MEC<C & B is ND
91	Hexachloroethane	1.9	Y	Y	1		1	Y	Y	1		N	No	UD;MEC<C & B is ND
92	Indeno(1,2,3-cd)Pyrene	0.0044	Y	Y	10			Y	Y	10		Y	No	UD; effluent data and B are ND
93	Isophorone	8.4	Y	Y	1		1	Y	Y	1		N	No	UD;MEC<C & B is ND
94	Naphthalene	No Criteria	Y	Y	1		No Criteria	Y	Y	1		N	Uo	No Criteria
95	Nitrobenzene	17	Y	Y	1		1	Y	Y	1		N	No	UD;MEC<C & B is ND
96	N-Nitrosodimethylamine	0.00069	Y	Y	5			Y	Y	5		Y	No	UD; effluent data and B are ND
97	N-Nitrosodi-n-Propylamine	0.0050	Y	Y	5			Y	Y	5		Y	No	UD; effluent data and B are ND
98	N-Nitrosodiphenylamine	5.0	Y	Y	1		1	Y	Y	1		N	No	UD;MEC<C & B is ND
99	Phenanthrene	No Criteria	Y	Y	5		No Criteria	Y	Y	5		N	Uo	No Criteria
100	Pyrene	960	Y	Y	10		10	Y	Y	10		N	No	UD;MEC<C & B is ND
101	1,2,4-Trichlorobenzene	5.0	Y	Y	5			Y	Y	5		N	No	UD; effluent data and B are ND
102	Aldrin	0.00013	Y	Y	0.0038			Y	Y	0.0038		Y	No	UD; effluent data and B are ND
103	alpha-BHC	0.0039	Y	Y	0.0043			Y	Y	0.0043		Y	No	UD; effluent data and B are ND
104	beta-BHC	0.014	Y	Y	0.0027		0.0027	Y	Y	0.0027		N	No	UD;MEC<C & B is ND
105	gamma-BHC	0.019	Y	Y	0.0041		0.0041	Y	Y	0.0041		N	No	UD;MEC<C & B is ND
106	delta-BHC	No Criteria	Y	Y	0.0021		No Criteria	Y	Y	0.0021		N	Uo	No Criteria
107	Chlordane	0.00057	Y	Y	0.035			Y	Y	0.035		Y	No	UD; effluent data and B are ND
108	4,4'-DDT	0.00059	Y	Y	0.0045			Y	Y	0.0045		Y	No	UD; effluent data and B are ND
109	4,4'-DDE	0.00059	Y	Y	0.0033			Y	Y	0.0033		Y	No	UD; effluent data and B are ND
110	4,4'-DDD	0.00083	Y	Y	0.0048			Y	Y	0.0048		Y	No	UD; effluent data and B are ND
111	Dieldrin	0.00014	Y	Y	0.0033			Y	Y	0.0033		Y	No	UD; effluent data and B are ND
112	alpha-Endosulfan	0.056	Y	Y	0.0042		0.0042	Y	Y	0.0042		N	No	UD;MEC<C & B is ND
113	beta-Endosulfan	0.056	Y	Y	0.0033		0.0033	Y	Y	0.0033		N	No	UD;MEC<C & B is ND
114	Endosulfan Sulfate	110	Y	Y	0.007		0.007	Y	Y	0.007		N	No	UD;MEC<C & B is ND
115	Endrin	0.036	Y	Y	0.0047		0.0047	Y	Y	0.0047		N	No	UD;MEC<C & B is ND
116	Endrin Aldehyde	0.76	Y	Y	0.0095		0.0095	Y	Y	0.0095		N	No	UD;MEC<C & B is ND
117	Heptachlor	0.00021	Y	Y	0.003			Y	Y	0.003		Y	No	UD; effluent data and B are ND
118	Heptachlor Epoxide	0.00010	Y	Y	0.003			Y	Y	0.003		Y	No	UD; effluent data and B are ND

CTR No.	Constituent name	C ⁵⁰ (µg/L)	Step 2	Step 3				Step 5					Final Result	
			Effluent Data Available (Y/N)?	Are all data points ND ⁵¹ (Y/N)	If all data points ND, enter the MDL ⁵² (µg/L)	Enter the pollutant effluent detected max conc (µg/L)	Pollutant Concentration ⁵³	B Available (Y/N)?	Are all B data points ND (Y/N)?	If all data points ND, enter the MDL (µg/L)	Enter the pollutant B detected max conc (µg/L)	If all B is ND, is MDL>C?	RPA Result	Reason ⁵⁴
119-125	PCBs sum	0.00017	Y	Y	0.19			Y	Y	0.19		Y	No	UD; effluent data and B are ND
126	Toxaphene	0.00020	Y	Y	0.21			Y	Y	0.21		Y	No	UD; effluent data and B are ND